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Montana Basin Outlook Report February 1, 1999



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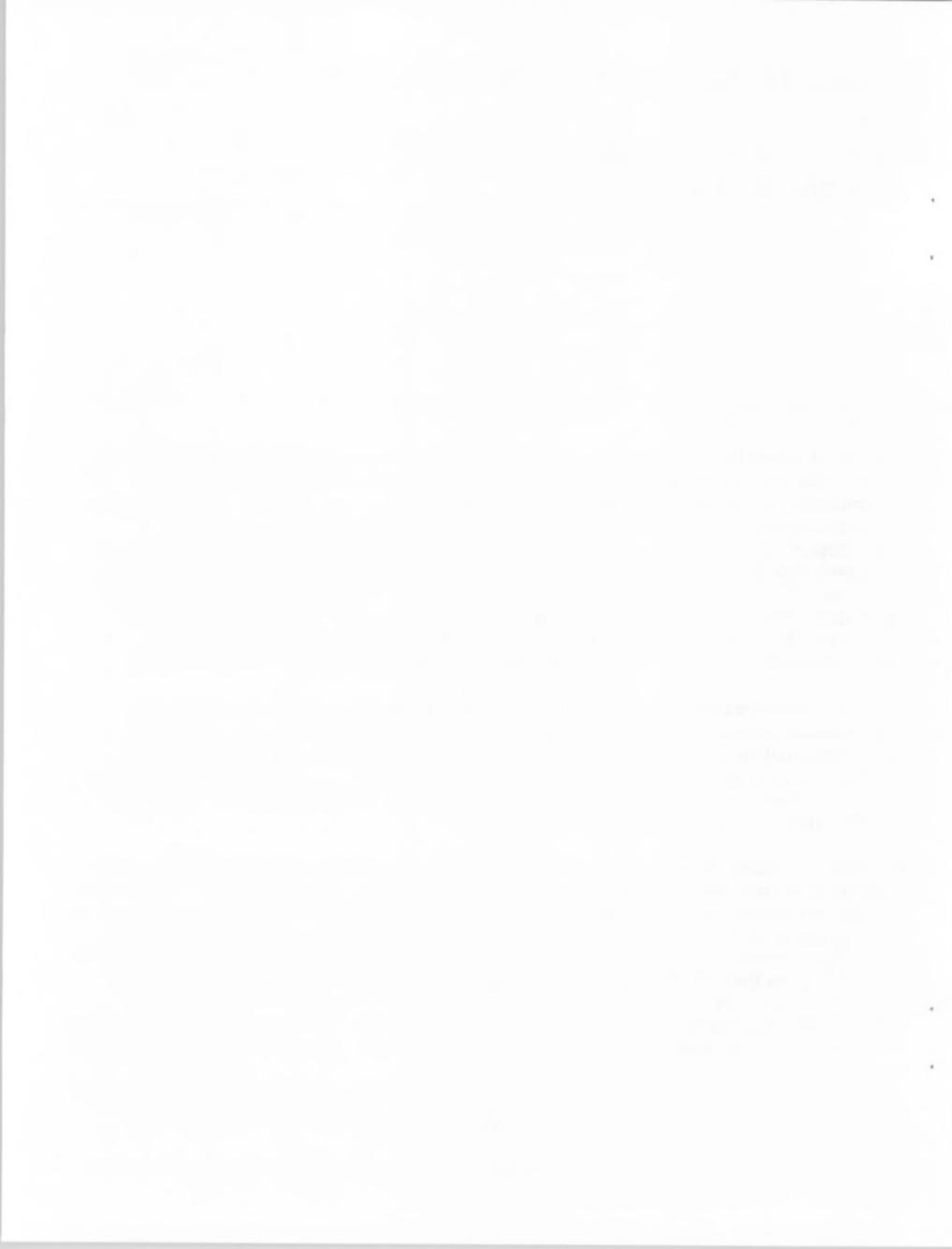
Most of the annual streamflow in the Western United States originates as snowfall that has accumulated high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are combined with snowpack data to prepare runoff forecasts. Streamflow forecasts are coordinated by Natural Resources Conservation Service and National Weather Service hydrologists. This report presents a comprehensive picture of water supply conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data, and narratives describing current conditions.

Snowpack data are obtained by using a combination of manual and automated SNOTEL measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation and temperature are monitored on a daily basis and transmitted via meteor burst telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

Forecast uncertainty originates from two sources: (1) uncertainty of future hydrologic and climatic conditions, and (2) error in the forecasting procedure. To express the uncertainty in the most probable forecast, four additional forecasts are provided. The actual streamflow can be expected to exceed the most probable forecast 50% of the time. Similarly, the actual streamflow volume can be expected to exceed the 90% forecast volume 90% of the time. The same is true for the 70%, 30%, and 10% forecasts. Generally, the 90% and 70% forecasts reflect drier than normal hydrologic and climatic conditions; the 30% and 10% forecasts reflect wetter than normal conditions. As the forecast season progresses, a greater portion of the future hydrologic and climatic uncertainty will become known and the additional forecasts will move closer to the most probable forecast.

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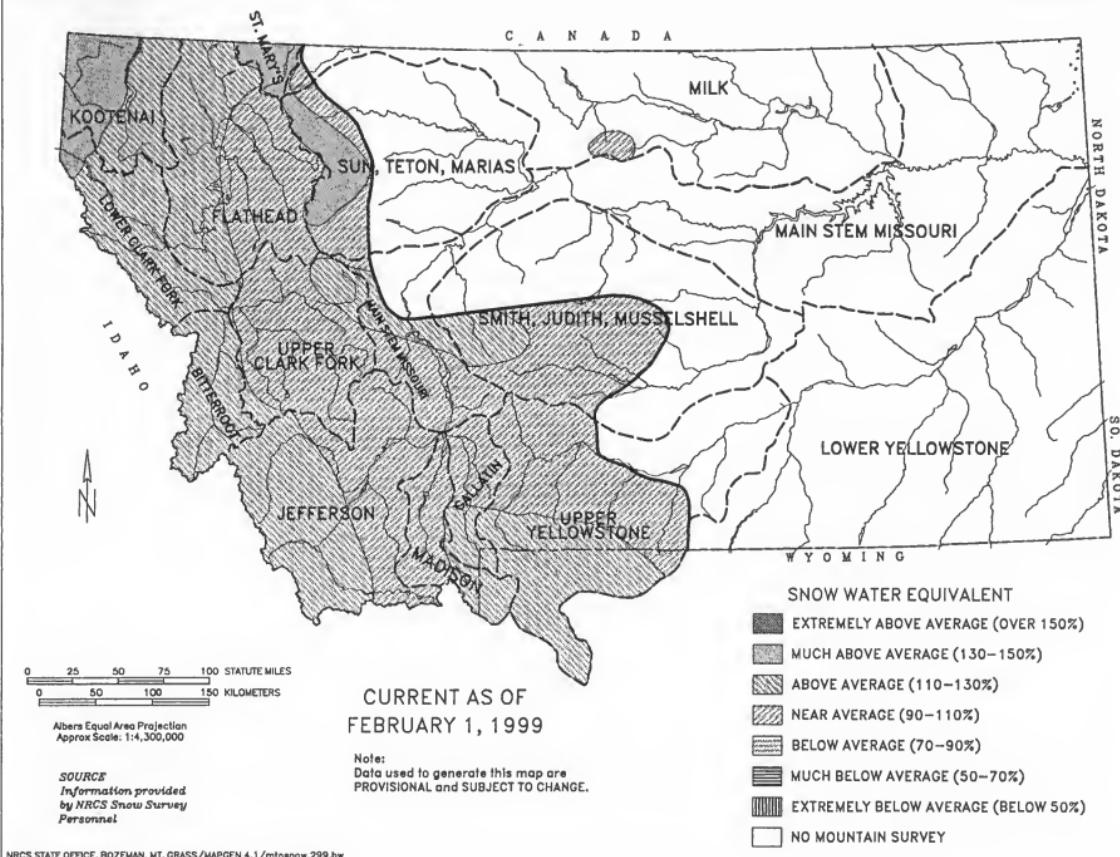
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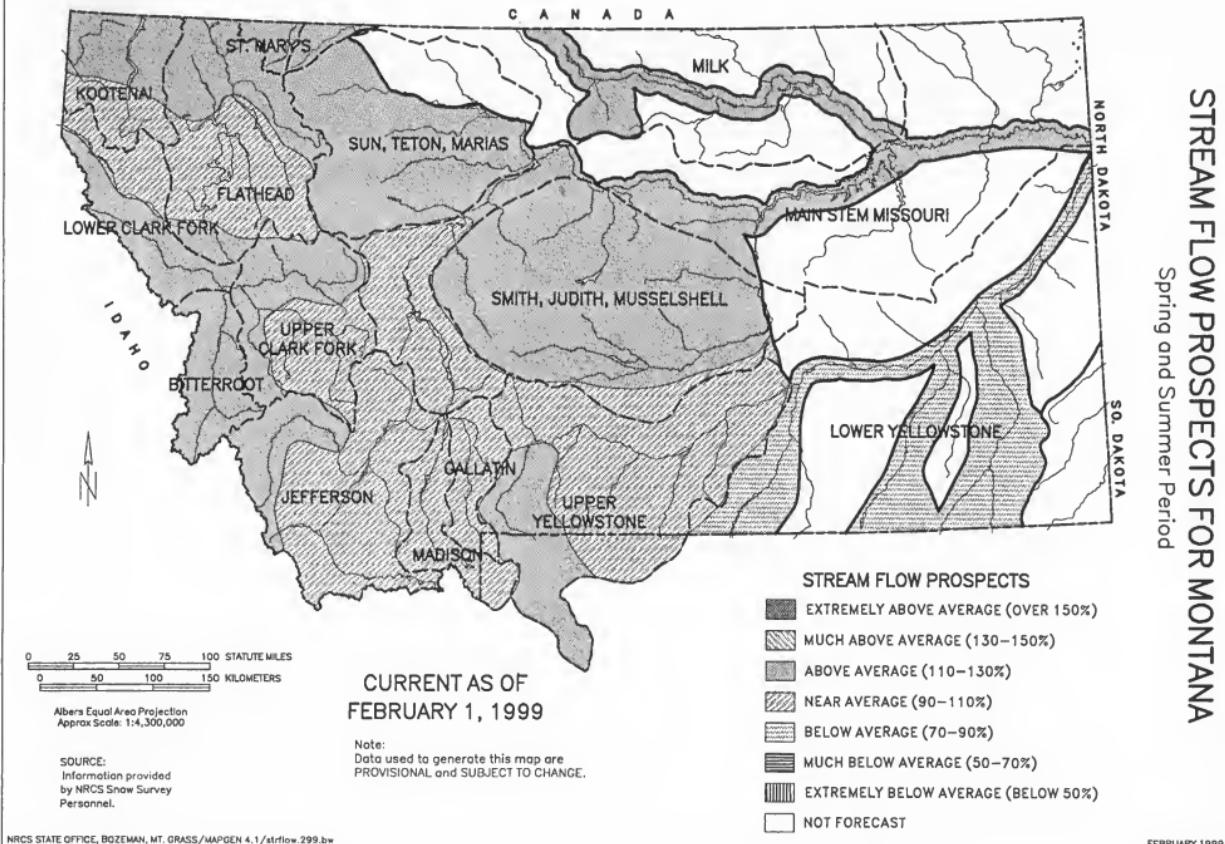
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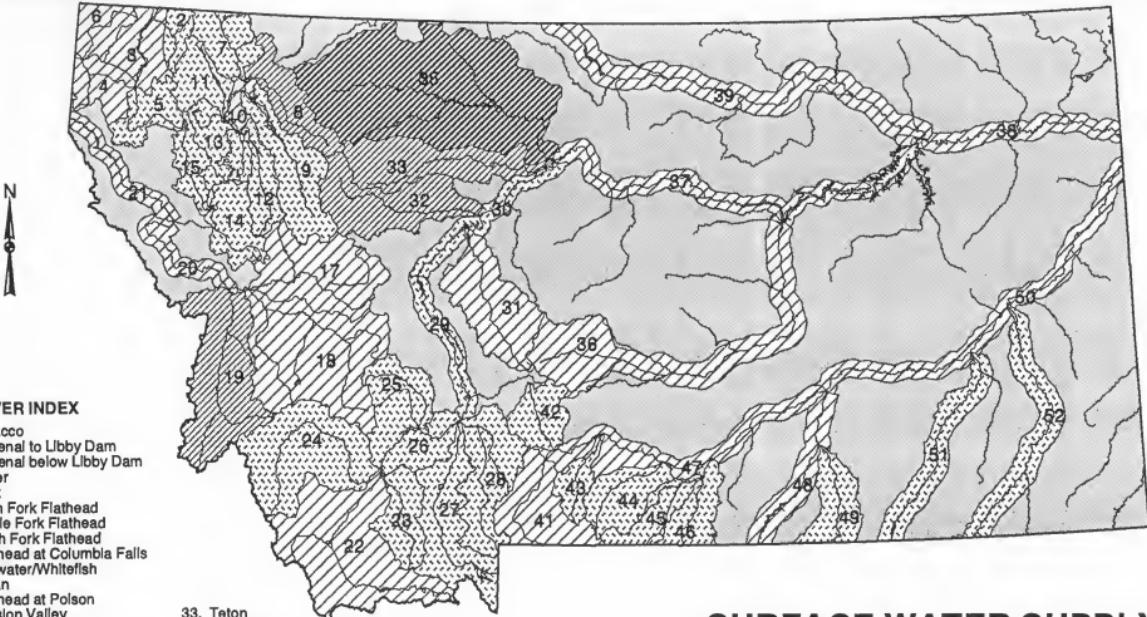
Mountain Snowwater Equivalent for Montana

U.S. DEPARTMENT OF AGRICULTURE

NATURAL RESOURCES CONSERVATION SERVICE







SURFACE WATER SUPPLY INDEX (SWSI) VALUES

SWSI VALUES

■	Extremely Dry (-4.0 to -3.0)
■■■	Moderately Dry (-2.9 to -2.0)
■■■■	Slightly Dry (-1.9 to -1.0)
■■■■■	Near Average (-.9 to .0)
■■■■■■	Slightly Wet (1.0 to 1.9)
■■■■■■■	Moderately Wet (2.0 to 2.9)
■■■■■■■■	Extremely Wet (3.0 to 4.0)
■■■■■■■■■	SWSI Not Applicable

CURRENT AS OF
FEBRUARY 1, 1999

NOTE: Data used to generate
this map are PROVISIONAL and
SUBJECT TO CHANGE.

ALBERS EQUAL AREA PROJECTION

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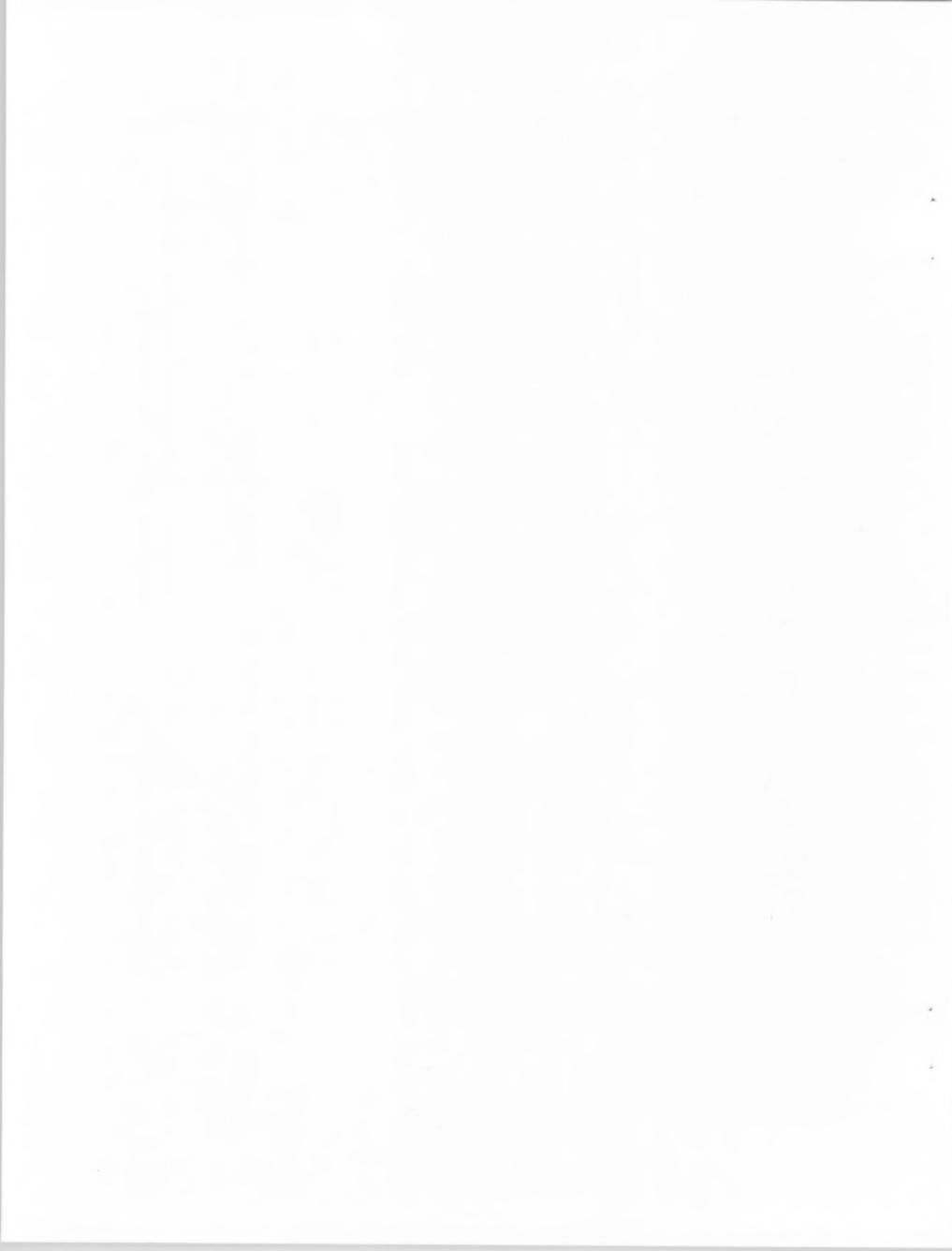
SUMMARY OF MONTANA SNOTEL AND SNOW COURSE DATA

FEBRUARY 1999

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-90
ABE LINCOLN	4440	1/30/99	62	17.4	11.2	--
ALBRO LAKE PILLOW	8300	2/01/99	---	13.6	9.8	13.4
ASHLEY LAKE	4000	1/26/99	19	4.5	2.7	3.9
ASHLEY DIVIDE	4820	1/26/99	22	4.7	4.0	5.0
BADGER PASS PILLOW	6900	2/01/99	---	29.8	17.3	22.8
BANFIELD MTN PILLOW	5600	2/01/99	---	18.7	10.3	13.6
BARKER LAKES PILLOW	8250	2/01/99	---	9.4	7.9	9.4
BASIN CREEK PILLOW	7180	2/01/99	---	6.2	6.3	5.0
BASSO PEAK	5150	1/29/99	33	7.4	4.6	--
BEAGLE SPGS PILLOW	8850	2/01/99	---	7.4	5.7	5.3
BEAVER CREEK PILLOW	7850	2/01/99	---	12.8	11.0	11.6
BISSON CREEK PILLOW	4920	2/01/99	---	5.4	5.3	6.9
BLACK BEAR PILLOW	7950	2/01/99	---	31.7	26.5	24.5
BLACK PINE PILLOW	7100	2/01/99	---	9.3	5.7	8.0
BLACKTAIL	5650	1/26/99	43	11.0	5.0	8.9
BLOODY DICK PILLOW	7550	2/01/99	---	10.3	8.3	8.2
BOULDER MTN PILLOW	7950	2/01/99	---	17.2	11.1	12.8
BOX CANYON PILLOW	6700	2/01/99	---	7.7	6.1	7.0
BOXELDER CREEK	5100	1/29/99	24	6.0	4.1	5.8
BRACKETT CR PILLOW	7320	2/01/99	---	15.9	11.8	12.9
CALVERT CR PILLOW	6430	2/01/99	---	8.4	5.3	6.1
CARROT BASIN PILLOW	9000	2/01/99	---	20.1	17.1	17.3
CHESSMAN RESERVOIR	6200	1/27/99	12	2.6	1.5	2.7
CHICKEN CREEK	4060	1/26/99	54	14.6	9.9	10.9
CLOVER MDW PILLOW	8800	2/01/99	---	11.2	11.8	11.5
COLE CREEK PILLOW	7850	2/01/99	---	6.7	8.8	10.2
COMBINATION PILLOW	5600	2/01/99	---	4.1	3.2	3.8
COPPER BOTTOM PILLOW	5200	2/01/99	---	10.8	4.7	7.4
COPPER CAMP PILLOW	6950	2/01/99	---	26.6	14.6	22.6
COPPER MOUNTAIN	7700	1/26/99	34	8.8	7.1	7.0
COYOTE HILL	4200	1/29/99	32	8.9	6.5	7.5
CREVISE MOUNTAIN	8400	1/26/99	34	8.8	9.5	--
CRYSTAL LAKE PILLOW	6050	2/01/99	---	6.5	5.4	8.4
DAISY PEAK	7600	1/27/99	33	8.0	3.6	7.0
DAISY PEAK PILLOW	7600	2/01/99	---	8.0	5.3	8.8
DAISY PEAK	7600	1/27/99	33	8.0	3.6	7.0
DALY CREEK PILLOW	5780	2/01/99	---	9.3	7.3	7.8
DARKHORSE LK. PILLOW	8700	2/01/99	---	24.4	17.9	22.0
DEADMAN CR PILLOW	6450	2/01/99	---	8.3	6.8	6.7
DISCOVERY BASIN	7050	1/26/99	32	7.4	6.2	6.8
DIVIDE PILLOW	7800	2/01/99	---	6.3	6.2	6.9
DIX HILL	6400	1/31/99	29	8.6	6.6	8.2
DUPUYER CREEK PILLOW	5750	2/01/99	---	9.0	2.5	7.8

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-90
EMERY CREEK PILLOW	4350	2/01/99	---	11.2	7.7	10.9
FISH CREEK	8000	1/27/99	30	8.3	8.0	6.4
FISHER CREEK PILLOW	9100	2/01/99	---	27.4	23.1	24.2
FLATTOP MTN PILLOW	6300	2/01/99	---	42.5	26.9	32.3
FOURTH OF JULY	3450	1/30/99	30	7.4	6.4	6.4
FROHNER MDWS PILLOW	6480	2/01/99	---	5.3	3.9	5.6
GARVER CREEK PILLOW	4250	2/01/99	---	8.3	7.9	7.3
GRAVE CRK PILLOW	4300	2/01/99	---	11.8	10.9	11.9
GRIFFIN CR DIVIDE	5150	1/29/99	36	9.4	4.0	--
HAND CREEK PILLOW	5030	2/01/99	---	9.1	6.4	8.3
HAWKINS LAKE PILLOW	6450	2/01/99	---	24.1	12.9	19.3
HEBGEN DAM	6550	1/26/99	34	7.0	7.9	8.3
HELL ROARING DIVIDE	5770	1/29/99	78	23.2	14.0	20.5
HERRIG JUNCTION	4850	1/27/99	72	20.9	15.5	16.7
HOLBROOK	4530	1/29/99	29	7.1	4.6	7.2
HOODOO BASIN	6050	1/27/99	134	41.4	27.1	33.4
HOODOO BASIN PILLOW	6050	2/01/99	---	39.2	23.6	31.0
INTERGAARD	6450	1/28/99	21	5.5	5.2	5.2
JOHNSON PARK	6450	1/27/99	24	5.4	2.9	4.8
KRAFT CREEK PILLOW	4750	2/01/99	---	10.3	8.5	11.4
LAKEVIEW RDG. PILLOW	7400	2/01/99	---	8.7	5.6	8.3
LEMHI RIDGE PILLOW	8100	2/01/99	---	7.7	7.6	6.9
LICK CREEK PILLOW	6860	2/01/99	---	6.0	6.7	8.1
LONE MOUNTAIN PILLOW	8880	2/01/99	---	13.7	11.7	11.5
LOWER TWIN PILLOW	7900	2/01/99	---	12.1	9.4	12.3
LUBRECHT PILLOW	4680	2/01/99	---	3.7	3.8	4.5
LUBRECHT FOREST NO 3	5450	1/29/99	20	4.7	2.4	5.0
LUBRECHT FOREST NO 4	4650	1/29/99	8	1.8	1.4	2.7
LUBRECHT FOREST NO 6	4040	1/29/99	8	2.0	1.2	3.2
LUBRECHT HYDROPLOT	4200	1/29/99	17	4.6	2.8	5.4
MADISON PLT PILLOW	7750	2/01/99	---	22.9	13.9	16.1
MANY GLACIER PILLOW	4900	2/01/99	---	14.7	9.2	11.4
MARIAS PASS	5250	1/29/99	53	16.4	9.8	11.2
MAYNARD CREEK	6210	1/28/99	37	10.2	7.2	9.7
MONUMENT PT PILLOW	8850	2/01/99	---	17.6	13.7	13.9
MOSS PEAK PILLOW	6780	2/01/99	---	24.5	18.4	24.4
MT LOCKHART PILLOW	6400	2/01/99	---	19.5	12.1	14.0
MULE CREEK PILLOW	8300	2/01/99	---	12.7	9.6	10.2
NEVADA CREEK PILLOW	6480	2/01/99	---	13.0	7.9	8.6
NEVADA RIDGE PILLOW	7020	2/01/99	---	13.9	8.7	9.1
NEW WORLD	6900	1/28/99	35	8.8	9.2	9.6
NEWTON MOUNTAIN	5600	1/28/99	93	30.8	20.2	22.2
NEZ PERCE CMP PILLOW	5650	2/01/99	---	11.4	9.0	9.8
NEZ PERCE CREEK	6600	1/26/99	23	5.2	4.1	4.5
NOISY BASIN PILLOW	6040	2/01/99	---	28.9	22.3	26.2
N.F. ELK CR PILLOW	6250	2/01/99	---	9.1	5.8	8.1
NF JOCKO PILLOW	6330	2/01/99	---	34.4	25.1	28.6
N.E. ENTRANCE PILLOW	7350	2/01/99	---	8.6	5.4	6.4
OPHIR PARK	7150	1/31/99	42	12.9	8.0	11.2
PETERSON MEADOWS	7200	1/26/99	27	6.1	5.8	6.6

SNOW COURSE	EL E V A T I O N	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-90
PETERSON MDW PILLOW	7200	2/01/99	---	6.4	6.2	6.5
PICKFOOT CRK PILLOW	6650	2/01/99	---	9.1	5.2	7.1
PIKE CREEK PILLOW	5930	2/01/99	---	24.0	13.4	17.1
PIPESTONE PASS	7200	1/28/99	19	5.2	3.0	3.3
PLACER BASIN PILLOW	8830	2/01/99	---	12.0	10.4	12.4
PORCUPINE PILLOW	6500	2/01/99	---	4.5	5.1	4.8
RED TOP	5260	1/30/99	79	25.5	16.1	18.4
REVAIS CREEK	4800	1/28/99	8	1.3	---	2.9
ROCKER PEAK PILLOW	8000	2/01/99	---	9.1	8.8	9.8
ROCKY BOY PILLOW	4700	2/01/99	---	4.2	3.0	3.6
ROCKY BOY	4700	1/29/99	16	3.8	2.1	3.2
SADDLE MTN PILLOW	7900	2/01/99	---	21.3	15.7	17.0
SHORT CREEK PILLOW	7000	2/01/99	---	3.4	4.2	3.6
SHOWER FALLS PILLOW	8100	2/01/99	---	13.7	14.2	14.8
SKALKAHO PILLOW	7260	2/01/99	---	19.6	14.5	15.8
S.F. SHIELDS PILLOW	8100	2/01/99	---	11.1	10.0	10.7
SPOTTED BEAR MTN.	7000	1/30/99	37	10.0	6.8	10.3
SPUR PARK PILLOW	8100	2/01/99	---	18.1	12.6	14.8
SLEEPING WOMAN PILL	6150	2/01/99	---	13.7	8.1	9.9
STAHL PEAK PILLOW	6030	2/01/99	---	28.5	22.2	23.5
STORM LAKE	7780	1/26/99	38	9.0	8.4	8.7
STRYKER BASIN	6180	1/27/99	79	24.4	18.7	21.6
STUART MOUNTAIN	7400	1/30/99	84	28.0	17.0	21.2
STUART MOUNTAIN PILL	7400	2/01/99	---	26.1	16.3	20.3
SUCKER CREEK	3960	1/29/99	0	.0	.0	.5
TAYLOR ROAD	4080	1/29/99	14	3.2	2.1	2.9
TEN MILE LOWER	6600	1/27/99	21	4.0	3.0	5.0
TEN MILE MIDDLE	6800	1/27/99	29	6.4	5.0	7.6
TEPEE CREEK PILLOW	8000	2/01/99	---	8.8	9.0	8.6
TIZER BASIN PILLOW	6840	2/01/99	---	5.8	6.7	7.2
TRINKUS LAKE	6100	1/30/99	97	28.8	19.8	25.0
TRUMAN CREEK	4060	1/31/99	13	2.8	2.0	3.2
TV MOUNTAIN	6800	1/30/99	50	15.6	8.0	12.0
TWELVEMILE PILLOW	5600	2/01/99	---	15.3	11.5	12.5
TWENTY-ONE MILE	7150	1/31/99	49	14.2	9.4	11.7
TWIN LAKES PILLOW	6400	2/01/99	---	36.9	24.9	26.3
UPPER HOLLAND LAKE	6200	1/30/99	79	25.0	19.8	23.4
WALDRON PILLOW	5600	2/01/99	---	10.7	5.9	7.8
WARM SPRINGS PILLOW	7800	2/01/99	---	15.6	13.9	14.1
WEASEL DIVIDE	5450	1/29/99	98	29.5	19.2	21.8
WEST YELLOWSTONE	6700	1/31/99	33	8.2	6.4	7.8
WEST YELL'ST PILLOW	6700	2/01/99	---	9.7	4.4	7.8
WHISKEY CREEK PILLOW	6800	2/01/99	---	13.4	9.5	11.2
WHITE MILL PILLOW	8700	2/01/99	---	18.4	17.5	16.8
WOOD CREEK PILLOW	5960	2/01/99	---	8.1	4.4	7.1



Montana Water Supply Outlook Report as of February 1, 1999

Storms during January tracked mainly along the Continental Divide and the eastern half of Montana. There was some arctic air that moved out of Canada and across the plains but generally temperatures for January were above average. Larger snow producing storms occurred mainly during the first half of January. East central Montana had freezing rain that closed many highways for several hours.

Snowpack

As of February 1, mountain snow water contents were ranging from below average for the Bighorn Mountains of Wyoming feeding the Lower Yellowstone River tributaries in south central Montana to well above average in northwest Montana. Mountain snow water content was 119 percent of average and 139 percent of last year. West of the Continental Divide, snowpack was 121 percent of average and 148 percent of last year and east of the Continental Divide, snowpack was 112 percent of average and 123 percent of last year.

Snowpack extremes were the highest in the Kootenai River Basin at 133 percent of average, and third highest of record, and the lowest in the Powder River Basin at 86 percent of average.

RIVER BASIN	% OF AVERAGE	% OF LAST YEAR
COLUMBIA	121	148
KOOTENAI	133#	153
FLATHEAD	118	147
UPPER CLARK FORK	114	139
BITTERROOT	131	146
LOWER CLARK FORK	131	167
MISSOURI	116	137
MISSOURI HEADWATERS	112	125
JEFFERSON	112	125
MADISON	115	127
GALLATIN	107	117
MISSOURI MAINSTEM	119	159
HEADWATERS MAINSTEM	113	137
SMITH-JUDITH-MUSSELSHELL	113	142
SUN-TETON-MARIAS	134	180
MAINSTEM ABOVE FT. PECK RES	120	154
MILK	125	224
ST. MARY	131	158
ST. MARY & MILK	128	181
YELLOWSTONE	108	110
UPPER YELLOWSTONE	118	125
LOWER YELLOWSTONE (WYOMING)	104	103
WIND	107	97
SHOSHONE	130	126
BIGHORN	113	117
TONGUE	87	91
POWDER	86	102

- Third highest of record

Precipitation

January mountain and valley precipitation across the state was 114 percent of average and 104 percent of last year, while the water year precipitation was 116 percent of average and 130 percent of last year.

West of the Continental Divide, January mountain and valley precipitation was 105 percent of average and 104 percent of last year and the water year precipitation was 118 percent of average and 137 percent of last year. East of the Divide, January mountain and valley precipitation was 122 percent of average and 102 percent of last year and the water year precipitation was 115 percent of average and 123 percent of last year.

RIVER BASIN	JANUARY % OF AVERAGE	WATER YEAR % OF AVERAGE
COLUMBIA	105	118
KOOTENAI	124	121
FLATHEAD	110	115
UPPER CLARK FORK	94	117
BITTERROOT	97	125
LOWER CLARK FORK	105	123
MISSOURI	114	112
JEFFERSON	110	112
MADISON	122	111
GALLATIN	133	100
MISSOURI MAINSTEM	90	108
SMITH-JUDITH-MUSSELSHELL	131	116
SUN-TETON-MARIAS	99	116
MILK	115	142
ST. MARY	113	122
YELLOWSTONE	134	119
UPPER YELLOWSTONE	143	115
LOWER YELLOWSTONE (WYOMING)	130	126
WIND	104	115
SHOSHONE	161	139
BIGHORN	149	128
TONGUE	101	95
POWDER	74	118

Reservoirs

Major reservoir storages statewide were 101 percent of average and 90 percent of last year.

Reservoir storage west of the Continental Divide was 98 percent of average and 87 percent of last year. East of the Continental Divide, reservoir storages were 104 percent of average and 94 percent of last year.

RIVER BASIN	% OF AVERAGE	% OF LAST YEAR
COLUMBIA	98	87
KOOTENAI	109	75
FLATHEAD	91	99
UPPER CLARK FORK	155	106
BITTERROOT	61	74
LOWER CLARK FORK	99	109
MISSOURI	108	95
JEFFERSON	109	95
MADISON	120	109
GALLATIN	172	89
MISSOURI MAINSTEM	104	97
SMITH-JUDITH-MUSSELSHELL	118	92
SUN-TETON-MARIAS	113	89
MILK	94	82
ST. MARY	52	44
YELLOWSTONE	100	94
UPPER YELLOWSTONE	101	95
LOWER YELLOWSTONE	100	93

Streamflow

Across Montana, streamflows are forecast to range between 104 and 122 percent of average. Last year, streamflow forecasts ranged from 66 to 93 percent of average.

West of the Continental Divide, streamflows are forecast to range between 100 and 122 percent of average. Last year streamflow forecasts ranged from 70 to 89 percent of average. East of the Continental Divide, streamflows are forecast to range between 105 and 125 percent of average. Last year streamflow forecasts ranged from 62 to 97 percent of average.

Below are River Basin streamflow forecast summaries for the period April 1 through July 31. THESE FORECASTS ASSUME NEAR NORMAL SPRING CONDITIONS AND DO NOT ACCOUNT FOR WELL BELOW AVERAGE (70% or less) OR WELL ABOVE AVERAGE (130% or more) PRECIPITATION, SNOWMELT OR SPRING RAIN. Specific forecast probabilities are available in each individual River Basin Report.

RIVER BASIN	April-July	April-July
	THIS YEAR % OF AVERAGE	LAST YEAR % OF AVERAGE
COLUMBIA	100 to 122	70 to 89
KOOTENAI	101 to 121	71 to 86
FLATHEAD	100 to 117	72 to 86
UPPER CLARK FORK	92 to 125	64 to 93
BITTERROOT	106 to 127	78 to 96
LOWER CLARK FORK	100 to 122	67 to 86
MISSOURI	95 to 127	68 to 103
JEFFERSON	86 to 120	68 to 100
MADISON	98 to 114	82 to 96
GALLATIN	84 to 107	78 to 98
MISSOURI MAINSTEM	97 to 124	67 to 99
SMITH-JUDITH-MUSSELSHELL	98 to 136	61 to 99
SUN-TETON-MARIAS	110 to 145	64 to 99
MILK	95 to 144	46 to 95
ST. MARY	106 to 118	75 to 87
YELLOWSTONE	92 to 118	71 to 94
UPPER YELLOWSTONE	96 to 117	81 to 102
LOWER YELLOWSTONE	89 to 118	61 to 87

NOTE: The APRIL-JULY LAST YEAR % OF AVERAGE column above, is what was forecast last year, not what actually occurred.

Surface Water Supply Index

The Surface Water Supply Index (SWSI) is an indicator of surface water supply conditions for the spring and summer months. Water users that rely on mountain precipitation can use the index to evaluate seasonal surface water supplies. The SWSI accounts for mountain snowpack, mountain precipitation, streamflow, reservoir storage, and soil moisture.

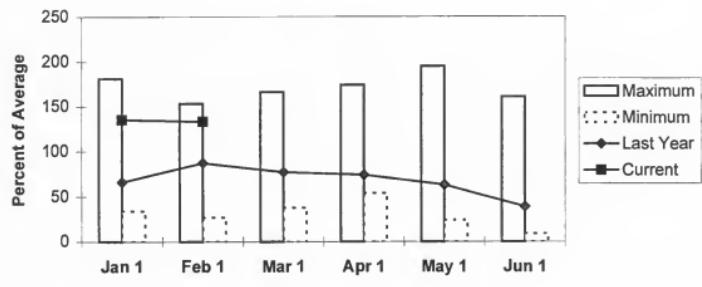
SWSI RATING	SURFACE WATER CONDITION
+3.0 to +4.0	Extremely Wet
+2.0 to +3.0	Moderately Wet
+1.0 to +2.0	Slightly Wet
-1.0 to +1.0	Near Average
-1.0 to -2.0	Slightly Dry
-2.0 to -3.0	Moderately Dry
-3.0 to -4.0	Extremely Dry

SWSI	Basin
+1.2	Kootenai River at Ft. Steele (Kootenai in Canada)
+0.8	Tobacco River
+1.0	Kootenai Ft. Steele to Libby Dam
+1.1	Kootenai River below Libby Dam
+0.4	Fisher River
+1.2	Yaak River
+0.7	North Fork Flathead River
+2.4	Middle FORK Flathead River
+0.8	South Fork Flathead River
+1.3	Flathead River at Columbia Falls
+0.9	Stillwater/Whitefish Rivers
+0.4	Swan River
+0.4	Flathead River at Polson
+0.1	Mission Valley
+0.5	Little Bitterroot River
+0.7	Clark Fork River above Rock Creek
+1.7	Blackfoot River
+1.3	Clark Fork River above Missoula
+2.2	Bitterroot River
+1.5	Clark Fork River below Bitterroot River
+1.5	Clark Fork River below Flathead River
+1.4	Beaverhead River
+0.4	Ruby River
+0.8	Big Hole River
0.0	Boulder River (Jefferson)
+0.8	Jefferson River
+0.7	Madison River
-0.1	Gallatin River
+0.6	Missouri River above Canyon Ferry
+0.7	Missouri River below Canyon Ferry
+1.9	Smith River
+2.7	Sun River
+2.9	Teton River
+3.2	Birch/Dupuyer Creeks
+3.2	Marias River
+1.5	Musselshell River
+1.7	Missouri River above Ft. Peck
+1.1	Missouri River below Ft. Peck
+1.3	Milk River
+1.9	Yellowstone River above Livingston
-0.4	Shields River
-0.2	Boulder River (Yellowstone)
-0.1	Stillwater River
+0.6	Rock/Red Lodge Creeks
+0.6	Clarks Fork River
+1.2	Yellowstone River above Bighorn River
+1.5	Bighorn River below Bighorn Lake
-0.6	Little Bighorn River
+1.4	Yellowstone River below Bighorn River
-0.6	Tongue River
-0.6	Powder River

Kootenai River Basin in Montana

Snowpack conditions in the Kootenai River Basin were well above average. Snow water content was 133 percent of average and 153 percent of last year. This is the third highest year of record for the period 1973 through 1998.

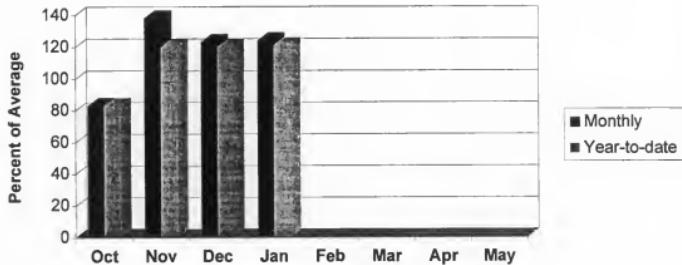
Kootenai Snow Water Equivalent



January maximum swe was established in 1997 and minimum was in 1977; February maximum swe was in 1997 and minimum swe was in 1977; March maximum swe was in 1972 and minimum swe was in 1977; April maximum swe was in 1974 and minimum swe was in 1977; May maximum swe was in 1974 and minimum swe was in 1977; and June maximum swe was in 1974 and minimum swe was in 1992. Average is for the period 1961 through 1990.

Mountain precipitation during January was 125 percent of average and 107 percent of last year. Valley precipitation during January was 98 percent of average and 105 percent of last year. Mountain and valley water year precipitation, beginning October 1, 1998, was 117 percent of average and 151 percent of last year.

Kootenai Precipitation



Lake Koocanusa storage was 109 percent of average and 75 percent of last year.

Surface Water Supply Indexes (SWSI's) were +1.2 in the Kootenai at Ft. Steele (Kootenai in Canada); +0.8 in the Tobacco River; +1.0 in the Kootenai Ft. Steele to Libby Dam; +1.1 in the Kootenai River below Libby Dam; +0.4 in the Fisher River; and +1.2 in the Yaak River.

KOOTENAI RIVER BASIN in Montana
Streamflow Forecasts - February 1, 1999

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)	
		Drier		Chance Of Exceeding *		Wetter			
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVO.)	30% (1000AF)	10% (1000AF)		
TOBACCO RIVER nr Kupaka	AFR-JUL	112	134	150	113	166	188	133	
	AFR-SEP	123	148	165	112	182	207	147	
LIBBY Reservoir Inflow (1,2)	AFR-JUL	4945	5842	6250	108	6658	7555	5779	
	AFR-SEP	5799	6852	7330	108	7808	8861	6772	
FISHER RIVER nr Libby	AFR-JUL	160	211	245	105	279	330	234	
	AFR-SEP	171	224	260	104	296	349	250	
YAAK RIVER nr Troy	AFR-JUL	468	535	580	120	625	692	483	
	AFR-SEP	491	559	605	120	651	719	505	
KOOTENAI at Leonia (1,2)	AFR-JUL	6211	7345	7860	109	8375	9509	7199	
	AFR-SEP	7133	8437	9030	109	9623	10927	8275	

KOOTENAI RIVER BASIN in Montana
Reservoir Storage (1000 AF) - End of January

KOOTENAI RIVER BASIN in Montana
Watershed Snowpack Analysis - February 1, 1999

Reservoir	Capacity	Usable Storage ***			Watershed	Number of Data Sites	This Year as % of Last Yr	Average
		This Year	Last Year	Avg				
LAKE KOOCANUSA	5748.0	2595.0	3468.0	2381.0	KOOTENAY in CANADA	17	169	130
					KOOTENAI MAINTSTEM	2	179	153
					TOBACCO	3	133	122
					FISHER	1	142	110
					YAAK	5	151	131
					KOOTENAI in MONTANA	11	153	133
					KOOTENAI ab BONNERS FERRY	28	161	132

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

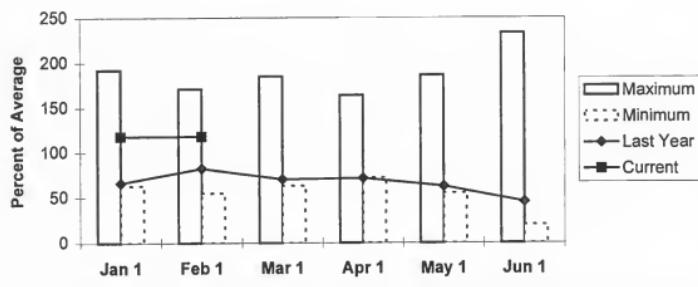
The average is computed for the 1961-1990 base period.

- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural volume - actual volume may be affected by upstream water management.
- (D) - The operational measurement of flow at this point has been discontinued.

Flathead River Basin

Snowpack conditions in the Flathead River Basin were above average. Snow water content was 118 percent of average and 147 percent of last year.

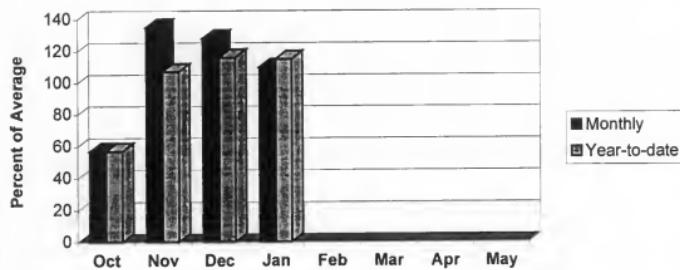
Flathead Snow Water Equivalent



January maximum swe was established in 1997 and minimum was in 1988; February maximum swe was in 1972 and minimum was in 1977; March maximum swe was in 1972 and minimum was in 1977; April maximum swe was in 1972 and minimum was in 1992; May maximum swe was in 1972 and minimum was in 1992; and June maximum swe was in 1974 and minimum was in 1992. Average is for the period 1961 through 1990.

Mountain precipitation during January was 112 percent of average and 109 percent of last year. Valley precipitation during January was 74 percent of average and 109 percent of last year. Mountain and valley water year precipitation, beginning October 1, 1998, was 100 percent of average and 168 percent of last year.

Flathead Precipitation



Combined Camas reservoir storage was 118 percent of average and 69 percent of last year; combined Mission Valley reservoir storage was 72 percent of average and 72 percent of last year; Hungry Horse storage was 104 percent of average and 99 percent of last year; and Flathead Lake storage was 63 percent of average and 102 percent of last year.

Surface Water Supply Indexes (SWSI's) were +0.7 in the North Fork Flathead River; +2.4 in the Middle Fork Flathead River; +0.8 in the South Fork Flathead River; +1.3 in the Flathead River at Columbia Falls; +0.9 in the Stillwater/Whitefish Rivers; +0.4 in the Swan River; +0.4 in the Flathead River at Polson; +0.1 in the Mission Valley; and +0.5 in the Little Bitterroot River.

FLATHEAD RIVER BASIN
Streamflow Forecasts - February 1, 1999

Forecast Point	Forecast Period	Drier				Future Conditions				Wetter			
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)			30-Yr Avg. (1000AF)			
MF FLATHEAD nr Columbia Falls	APR-JUL	1539	1700	1810	109	1920	2081	1662					
	APR-SEP	1706	1881	2000	109	2119	2294	1836					
MF FLATHEAD nr West Glacier	APR-JUL	1545	1697	1800	110	1903	2055	1638					
	APR-SEP	1698	1860	1970	110	2080	2242	1788					
HUNGRY HORSE Reservoir Inflow (1,2)	APR-JUL	1741	2091	2250	110	2409	2759	2051					
	APR-SEP	1881	2238	2400	110	2562	2919	2184					
FLATHEAD at Columbia Falls (1,2)	APR-JUL	4683	5596	6010	110	6424	7337	5482					
	APR-SEP	5113	6087	6530	110	6973	7947	5960					
STILLWATER nr Whitefish	APR-JUL	142	183	210	111	237	278	189					
	APR-SEP	157	201	230	110	259	303	209					
WHITEFISH nr Kalispell	APR-JUL	85	100	110	106	120	135	104					
	APR-SEP	91	108	120	103	132	149	116					
SWAN RIVER nr Bigfork	APR-JUL	475	553	605	104	657	735	583					
	APR-SEP	542	630	690	104	750	838	665					
FLATHEAD Lake Inflow (1,2)	APR-JUL	5941	6786	7170	112	7554	8399	6390					
	APR-SEP	6436	7353	7770	112	8187	9104	6926					

FLATHEAD RIVER BASIN
Reservoir Storage (1000 AF) - End of January

FLATHEAD RIVER BASIN
Waterehed Snowpack Analysis - February 1, 1999

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year	as % of Last Yr Average
		This Year	Last Year	Avg				
CANAS (4)	45.2	22.9	33.2	19.4	NF FLATHEAD in CANADA	3	150	115
MISSION VALLEY (8)	100.0	26.0	35.9	36.2	NF FLATHEAD in MONTANA	7	145	124
HUNGRY HORSE	3451.0	2447.0	2468.0	2362.0	MIDDLE FORK FLATHEAD	5	165	131
FLATHEAD LAKE	1791.0	694.3	682.4	1095.0	SOUTH FORK FLATHEAD	6	137	108
					STILLWATER-WHITEFISH	7	142	117
					SWAN	6	133	109
					MISSION VALLEY	3	143	102
					LITTLE BITTERROOT-ASHLEY	4	168	110
					JOCKO	4	156	127
					FLATHEAD in MONTANA	30	146	118
					FLATHEAD RIVER BASIN	33	147	118

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

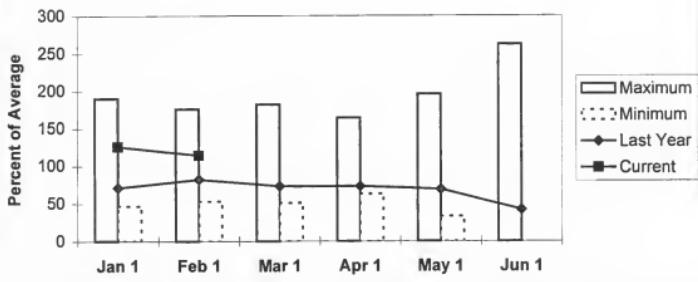
(2) - The value is natural volume - actual volume may be affected by upstream water management.

(D) - The operational measurement of flow at this point has been discontinued.

Upper Clark Fork River Basin

Snowpack conditions in the Upper Clark Fork River Basin were above average. Snow water content was 114 percent of average and 139 percent of last year.

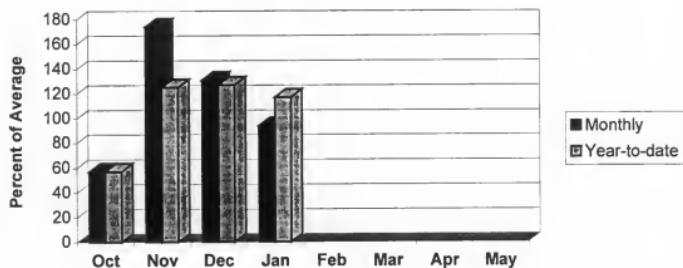
Upper Clark Fork Snow Water Equivalent



January maximum swe was established in 1997 and minimum swe was in 1977; February maximum was in 1972 and minimum swe was in 1977; March maximum swe was in 1972 and minimum swe was in 1977; April maximum swe was in 1972 and minimum was in 1994; May maximum swe was in 1972 and minimum swe was in 1977; and June maximum swe was in 1975 and minimum swe was in 1987. Average is for the period 1961 through 1990.

Mountain precipitation during January was 96 percent of average and 100 percent of last year. Valley precipitation during January was 74 percent of average and 87 percent of last year. Mountain and valley water year precipitation, beginning October 1, 1998, was 117 percent of average and 132 percent of last year.

Upper Clark Fork Precipitation



Lower Willow Creek storage was 147 percent of average and 110 percent of last year; and Nevada Creek storage was 158 percent of average and 105 percent of last year.

Surface Water Supply Indexes (SWSI's) were +0.7 in the Clark Fork River above Rock Creek; +1.7 in the Blackfoot River; and +1.3 in the Clark Fork River above Missoula.

UPPER CLARK FORK RIVER BASIN
Streamflow Forecasts - February 1, 1999

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)	
		<===== Drier =====>		Chance Of Exceeding		Wetter =====>			
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVO.)	30% (1000AF)	10% (1000AF)		
WARM SPRINGS CK at Anaconda (D)	APR-JUL	23	32	38	100	44	53	38	
	APR-SEP	30	40	47	100	54	64	47	
LITTLE BLACKFOOT nr Garrison	APR-JUL	41	67	85	102	103	0.0	83	
	APR-SEP	46	73	92	103	111	138	89	
FLINT CREEK nr Southern Cross	APR-JUL	7.4	11.6	14.5	102	17.4	22	14.2	
	APR-SEP	8.1	13.4	16.9	101	20	26	16.7	
FLINT CREEK b/w Boulder Ck	APR-JUL	35	50	61	107	72	87	57	
	APR-SEP	46	64	77	106	90	110	73	
LOWER WILLOW CK Reservoir Inflow	APR-JUL	7.1	11.6	14.6	104	17.6	22	14.0	
	APR-SEP	7.8	12.4	15.5	105	18.6	23	14.8	
MF ROCK CREEK nr Philipsburg	APR-JUL	57	69	77	117	85	97	66	
	APR-SEP	63	76	85	115	94	107	74	
ROCK CREEK nr Clinton	APR-JUL	237	298	340	115	382	443	296	
	APR-SEP	268	335	380	114	425	492	333	
NEVADA CREEK nr Finn	APR-JUL	11.8	17.3	21	110	25	30	19.1	
	APR-SEP	12.4	18.1	22	105	26	32	21	
CLEARWATER nr Clearwater	APR-JUL	119	152	175	102	198	231	172	
	APR-SEP	127	161	185	102	209	243	181	
BLACKFOOT RIVER nr Bonner	APR-JUL	699	857	965	116	1073	1231	835	
	APR-SEP	788	956	1070	116	1184	1352	926	
CLARK FORK abv Milltown	APR-JUL	448	616	730	112	844	1012	652	
	APR-SEP	526	713	840	111	967	1154	755	
CLARK FORK abv Missoula	APR-JUL	1307	1535	1690	114	1845	2073	1487	
	APR-SEP	1493	1741	1910	114	2079	2327	1681	

UPPER CLARK FORK RIVER BASIN
Reservoir Storage (1000 AF) - End of January

UPPER CLARK FORK RIVER BASIN
Watershed Snowpack Analysis - February 1, 1999

Reservoir	Capacity	Usable Storage			Watershed	Number of Data Sites	This Year as % of Last Yr Average
		This Year	Last Year	Avg			
GEORGETOWN LAKE		NO REPORT			CLARK FORK ab FLINT CREEK	11	131
LOWER WILLOW CREEK	4.9	2.2	2.0	1.5	FLINT CREEK	6	119
NEVADA CREEK	12.6	6.8	6.5	4.3	ROCK CREEK	3	120
					CLARK FORK ab BLACKFOOT	17	130
					BLACKFOOT	15	156
					UPPER CLARK FORK BASIN	29	139
							114

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

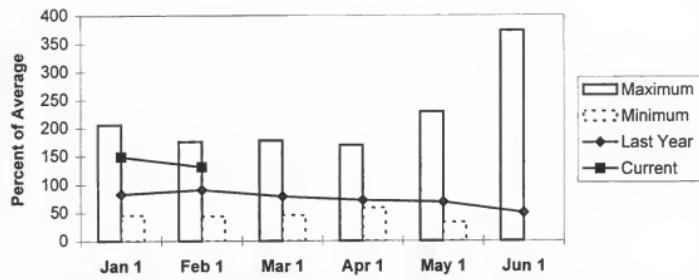
(2) - The value is natural volume - actual volume may be affected by upstream water management.

(D) - The operational measurement of flow at this point has been discontinued.

Bitterroot River Basin

Snowpack conditions in the Bitterroot River Basin were well above average. Snow water content was 131 percent of average and 146 percent of last year.

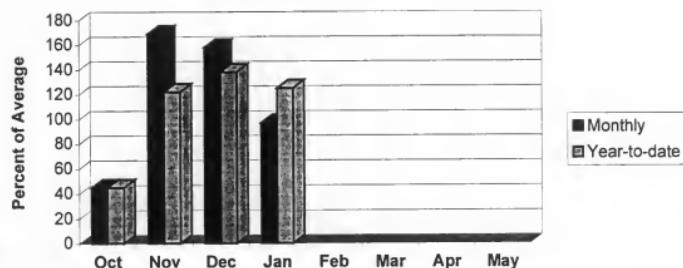
Bitterroot Snow Water Equivalent



January maximum swe was established in 1997 and minimum swe in 1977; February maximum swe was in 1972 and minimum was in 1977; March maximum swe was in 1972 and minimum swe was in 1977; April maximum swe was in 1972 and minimum swe was in 1977; May maximum swe was in 1972 and minimum swe was in 1987; and June maximum swe was 1972 and 1974 and minimum swe was in 1987 and 1992. Average is for the period 1961 through 1990.

Mountain precipitation during January was 101 percent of average and 103 percent of last year. Valley precipitation during January was 56 percent of average and 53 percent of last year. Mountain and valley water year precipitation, beginning October 1, 1998, was 125 percent of average and 128 percent of last year.

Bitterroot Precipitation



Painted Rocks Lake storage was 56 percent of average and 209 percent of last year and Como storage was 67 percent of average and 46 percent of last year.

Surface Water Supply Index (SWSI) was +2.2 in the Bitterroot River.

BITTERROOT RIVER BASIN
Streamflow Forecasts - February 1, 1999

Forecast Point	Forecast Period	<< Drier Future Conditions Wetter >>				30-Yr Avg. (1000AF)		
		Chance Of Exceeding *		50% (Most Probable) (1000AF)	30% (1000AF)			
		90% (1000AF)	70% (1000AF)					
WF BITTERROOT nr Conner (2)	APR-JUL	130	160	180	118	200	230	152
	APR-SEP	140	173	195	118	217	250	166
BITTERROOT nr Darby	APR-JUL	431	514	570	116	626	709	491
	APR-SEP	482	567	625	116	683	768	540
COMO Reservoir Inflow	APR-JUL	81	89	95	120	101	109	79
	APR-SEP	86	94	100	121	106	114	83
SKALKAHO CK nr Hamilton	APR-JUL	39	47	53	115	59	68	46
	APR-SEP	44	54	60	113	67	76	53
BITTERROOT at Missoula	APR-JUL	1220	1375	1480	114	1585	1740	1300
	APR-SEP	1346	1509	1620	114	1731	1894	1420

BITTERROOT RIVER BASIN				BITTERROOT RIVER BASIN				
Reservoir Storage (1000 AF) - End of January				Watershed Snowpack Analysis - February 1, 1999				
Reservoir	Usable Capacity	*** Usable Storage ***	Watershed	Number of Data Sites	This Year as % of	Last Yr	Average	
		This Year Year	Last Year Year	Avg				
PAINTED ROCKS LAKE	31.7	7.1	3.4	12.7	WEST FORK BITTERROOT	2	132	122
COMO	34.9	7.4	16.2	11.1	EAST SIDE BITTERROOT	3	134	124
					WEST SIDE BITTERROOT	3	158	138
					BITTERROOT RIVER BASIN	7	146	131

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

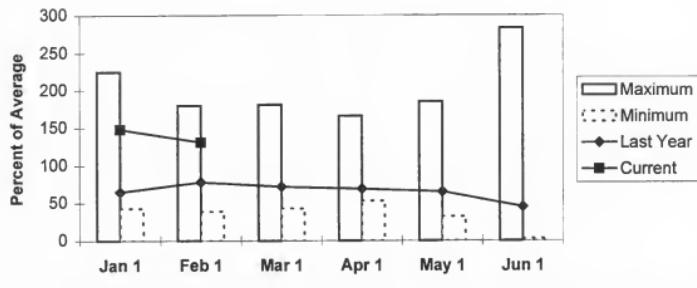
(2) - The value is natural volume - actual volume may be affected by upstream water management.

(D) - The operational measurement of flow at this point has been discontinued.

Lower Clark Fork River Basin

Snowpack conditions in the Lower Clark Fork River Basin were well above average. Snow water content was 131 percent of average and 167 percent of last year.

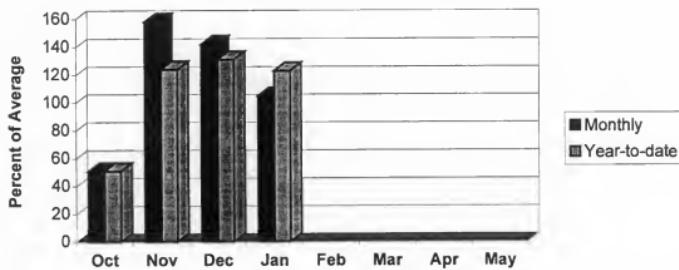
Lower Clark Fork Snow Water Equivalent



January maximum swe was established in 1997 and minimum swe was in 1977; February maximum swe was in 1972 and minimum swe was in 1977; March maximum swe was in 1972 and minimum was in 1977; April maximum swe was in 1972 and minimum swe was in 1981; May maximum swe was in 1972 and minimum swe was in 1977; and June maximum swe was in 1974 and minimum swe was in 1977. Average is for the period 1961 through 1990.

Mountain precipitation during January was 106 percent of average and 108 percent of last year. Valley precipitation during January was 96 percent of average and 122 percent of last year. Mountain and valley water year precipitation, beginning October 1, 1998, was 123 percent of average and 147 percent of last year.

Lower Clark Fork Precipitation



Noxon Rapids storage was 99 percent of average and 109 percent of last year.

Surface Water Supply Indexes (SWSI's) were +1.5 in the Clark Fork River below Bitterroot River and +1.5 in the Clark Fork River below Flathead River.

LOWER CLARK FORK RIVER BASIN
Streamflow Forecasts - February 1, 1999

Forecast Point	Forecast Period	<===== Drier ===== Future Conditions =====>=				30-Yr Avg. (1000AF)
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (Most Probable) (1000AF) (% AVG.)	30% (1000AF)	
CLARK FORK abv Missoula	APR-JUL	1307	1535	1690 114	1845	2073 1487
	APR-SEP	1493	1741	1910 114	2079	2327 1681
CLARK FORK blw Missoula	APR-JUL	2591	2942	3180 114	3419	3770 2788
	APR-SEP	2894	3273	3530 114	3787	4166 3099
CLARK FORK at St. Regis (1)	APR-JUL	2715	3736	4200 114	4664	5685 3686
	APR-SEP	3021	4155	4670 114	5185	6319 4095
CLARK FORK nr Plains (1,2)	APR-JUL	8601	10663	11600 111	12537	14599 10450
	APR-SEP	9403	11670	12700 111	13730	15997 11470
THOMPSON nr Thompson Falls	APR-JUL	150	198	230 108	262	310 214
	APR-SEP	176	226	260 108	294	344 240
PROSPECT CREEK at Thompson Falls	APR-JUL	100	121	135 110	149	170 123
	APR-SEP	103	125	140 106	155	177 132
CLARK FK at Whitehorse Rpd (1,2)	APR-JUL	9262	11626	12700 108	13774	16138 11730
	APR-SEP	10217	12819	14000 108	15181	17783 12910

LOWER CLARK FORK RIVER BASIN
Reservoir Storage (1000 AF) - End of January

LOWER CLARK FORK RIVER BASIN
Watershed Snowpack Analysis - February 1, 1999

Reservoir	Capacity	Usable Storage ***			Watershed	Number of Data Sites	This Year as % of Last Yr	Average
		This Year	Last Year	Avg				
NOXON RAPIDS	335.0	310.6	285.7	314.2	LOWER CLARK FORK BASIN	7	167	131

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

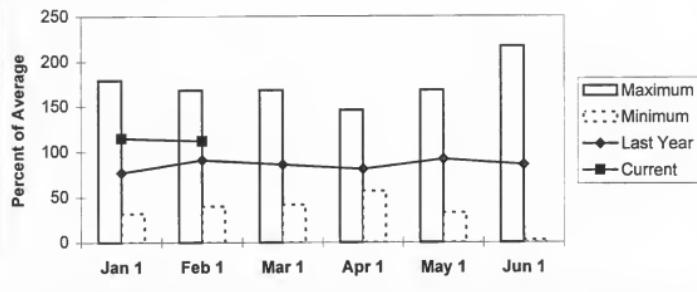
(2) - The value is natural volume - actual volume may be affected by upstream water management.

(D) - The operational measurement of flow at this point has been discontinued.

Jefferson River Basin

Snowpack conditions in the Jefferson River Basin were above average. Snow water content was 112 percent of average and 125 percent of last year.

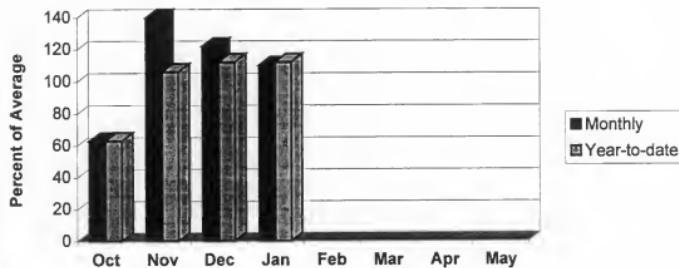
Jefferson Snow Water Equivalent



January maximum SWE was established in 1997 and minimum SWE was in 1977; February maximum SWE was in 1997 and minimum was in 1977; March maximum SWE was in 1972 and minimum was in 1977; April maximum SWE was in 1972 and minimum was in 1977; May maximum SWE was in 1975 and minimum SWE was in 1977; and June maximum SWE was in 1982 and minimum in 1987. Average is for the period 1961 through 1990.

Mountain precipitation during January was 110 percent of average and 92 percent of last year. Valley precipitation during January was 112 percent of average and 64 percent of last year. Mountain and valley water year precipitation, beginning October 1, 1998, was 112 percent of average and 114 percent of last year.

Jefferson Precipitation



Lima storage was 143 percent of average and 111 percent of last year; Clark Canyon storage was 102 percent of average and 93 percent of last year; and Ruby River storage was 108 percent of average and 87 percent of last year.

Surface Water Supply Indexes (SWSI's) were +1.4 in the Beaverhead River; +0.4 in the Ruby River; +0.8 in the Big Hole River; 0.0 in the Boulder River; and +0.8 for the Jefferson River as a whole.

JEFFERSON RIVER BASIN
Streamflow Forecasts - February 1, 1999

Forecast Point	Forecast Period	<<---- Drier ----- Future Conditions ----- Wetter ----->>				30-Yr Avg. (1000AF)
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF) (% AVG.)	30% (1000AF) (1000AF)	
LIMA Reservoir Inflow (2)	APR-JUL	56	81	98 101	115 140	97
	APR-SEP	58	88	108 103	128 158	105
BEAVERHEAD RIVER near Grant (2)	APR-JUL	97	125	145 110	165 193	132
	APR-SEP	108	145	170 110	195 232	155
CLARK CANYON Reservoir Inflow (2)	APR-JUL	131	162	183 106	204 235	172
	APR-SEP	163	197	220 108	243 277	203
RUBY RIVER Reservoir Inflow	APR-JUL	50	65	75 90	85 100	83
	APR-SEP	61	78	90 91	102 119	99
BIG HOLE RIVER near Melrose	APR-JUL	497	636	730 114	824 963	641
	APR-SEP	537	688	790 113	892 1043	697
BOULDER RIVER near Boulder	APR-JUL	41	67	85 100	103 129	85
	APR-SEP	45	73	92 101	111 139	91
WILLOW CREEK Reservoir Inflow	APR-JUL	5.8	13.1	18.0 102	23 30	17.7
	APR-SEP	5.9	14.3	20 100	26 34	20
JEFFERSON RIVER near Three Forks (2)	APR-JUL	657	858	995 101	1132 1333	985
	APR-SEP	737	953	1100 109	1247 1463	1012

JEFFERSON RIVER BASIN
Reservoir Storage (1000 AF) - End of January

JEFFERSON RIVER BASIN
Watershed Snowpack Analysis - February 1, 1999

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of Last Yr Average
		This Year	Last Year	Avg			
LIMA	84.0	47.6	42.8	33.4	BEAVERHEAD	8	129 115
CLARK CANYON	255.6	147.5	159.1	144.7	RUBY	5	113 98
RUBY RIVER	38.8	25.6	29.4	23.8	BIGHOLE	10	128 119
					BOULDER	8	123 109
					JEFFERSON RIVER BASIN	26	125 112

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

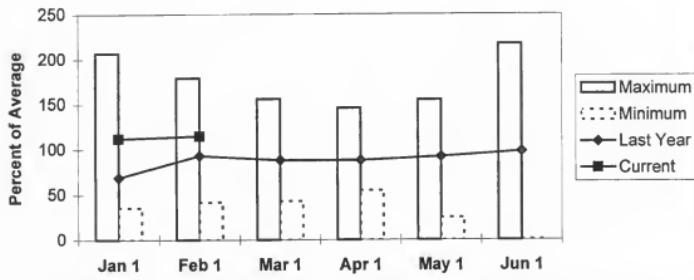
(2) - The value is natural volume - actual volume may be affected by upstream water management.

(D) - The operational measurement of flow at this point has been discontinued.

Madison River Basin

Snowpack conditions in the Madison River Basin were above average. Snow water content was 115 percent of average and 127 percent of last year.

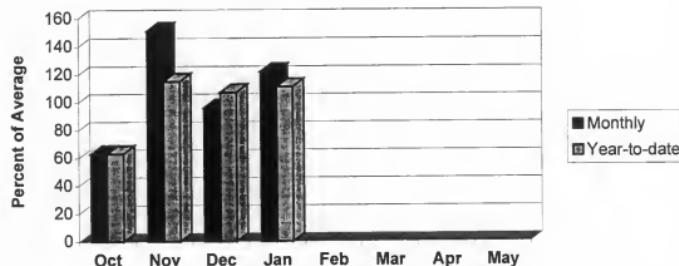
Madison Snow Water Equivalent



January maximum swe was established in 1997 and minimum swe was in 1977; February maximum swe was in 1997 and minimum was in 1977; March maximum swe was in 1997 and minimum was in 1977; April maximum swe was in 1997 and minimum was in 1977; May maximum swe was in 1997 and minimum swe was in 1977; and June maximum swe was in 1995 and minimum in 1987. Average is for the period 1961 through 1990.

Mountain and valley precipitation during January was 123 percent of average and 89 percent of last year. Mountain and valley water year precipitation, beginning October 1, 1998, was 111 percent of average and 115 percent of last year.

Madison Precipitation



Ennis Lake storage was 84 percent of average and 97 percent of last year and Hebgen Lake storage was 125 percent of average and 110 percent of last year.

Surface Water Supply Index (SWSI) was +0.7 for the Madison River.

MADISON RIVER BASIN
Streamflow Forecasts - February 1, 1999

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)	
		<< Drier >>		Chance Of Exceeding *		>> Wetter <<			
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)		
HEBGEN LAKE Inflow (2)	APR-JUL	339	384	415	109	446	491	380	
	APR-SEP	438	490	525	108	560	612	486	
ENNIS LAKE Inflow (2)	APR-JUL	562	638	690	104	742	818	662	
	APR-SEP	715	807	870	105	933	1025	831	

MADISON RIVER BASIN
Reservoir Storage (1000 AF) - End of January

MADISON RIVER BASIN
Watershed Snowpack Analysis - February 1, 1999

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			This Yr	Average
ENNIS LAKE	41.0	28.5	29.5	34.0	MADISON abv HEBGEN LAKE	6	144	126
HEBGEN LAKE	377.5	307.8	280.2	246.8	MADISON blw HEBGEN LAKE	8	113	105
					MADISON RIVER BASIN	14	127	115

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

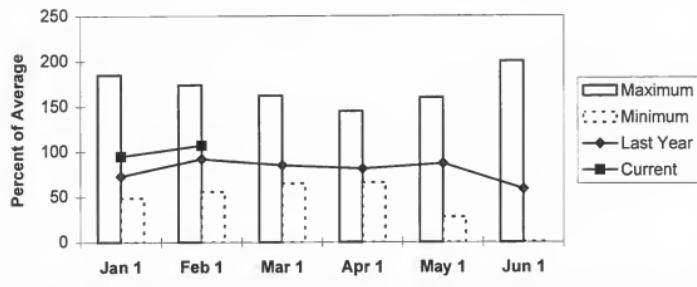
(2) - The value is natural volume - actual volume may be affected by upstream water management.

(D) - The operational measurement of flow at this point has been discontinued.

Gallatin River Basin

Snowpack conditions in the Gallatin River Basin were near average. Snow water content was 107 percent of average and 117 percent of last year.

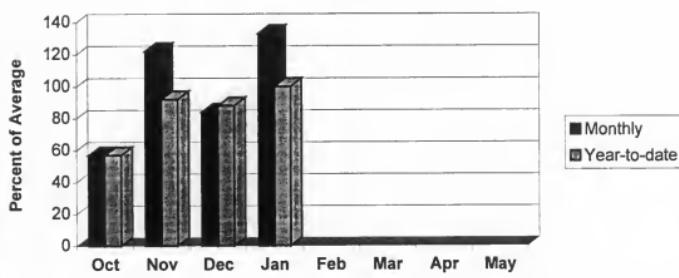
Gallatin Snow Water Equivalent



January maximum swe was established in 1997 and minimum swe was in 1966; February maximum swe was in 1997 and minimum was in 1981; March maximum swe was in 1997 and minimum was in 1977 and 1987; April maximum swe was in 1997 and minimum was in 1987; May maximum swe was in 1970 and minimum swe was in 1987; and June maximum swe was in 1975 and minimum in 1987. Average is for the period 1961 through 1990.

Mountain precipitation during January was 135 percent of average and 110 percent of last year. Valley precipitation during January was 82 percent of average and 91 percent of last year. Mountain and valley water year precipitation, beginning October 1, 1998, was 100 percent of average and 114 percent of last year.

Gallatin Precipitation



Middle Creek storage was 172 percent of average and 89 percent of last year.

Surface Water Supply Index (SWSI) was -0.1 for the Gallatin River.

GALLATIN RIVER BASIN
Streamflow Forecasts - February 1, 1999

Forecast Point	Forecast Period	<< Drier Future Conditions >>				Wetter	
		Chance Of Exceeding +		30% (1000AF)	10% (1000AF)		
		90% (1000AF)	70% (1000AF)				
GALLATIN RIVER near Gateway	APR-JUL	355	412	450	102	488	
	APR-SEP	417	481	525	101	569	
HYALITE Reservoir Inflow	APR-JUL	15.1	18.3	21	89	23	
	APR-SEP	17.6	21	23	90	26	
HYALITE CREEK nr Bozeman (2)	APR-JUL	23	29	33	91	37	
	APR-SEP	27	33	38	90	42	
GALLATIN RIVER at Logan (2)	APR-JUL	297	415	495	99	575	
	APR-SEP	355	486	575	99	664	
						795	
						581	

GALLATIN RIVER BASIN
Reservoir Storage (1000 AF) - End of January

GALLATIN RIVER BASIN
Watershed Snowpack Analysis - February 1, 1999

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of Last Yr	Average
		This Year	Last Year	Avg				
MIDDLE CREEK	10.2	6.2	7.0	3.6	UPPER GALLATIN	4	124	117
					HYALITE	3	95	88
					BRIDGER	2	137	115
					GALLATIN RIVER BASIN	9	117	108

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

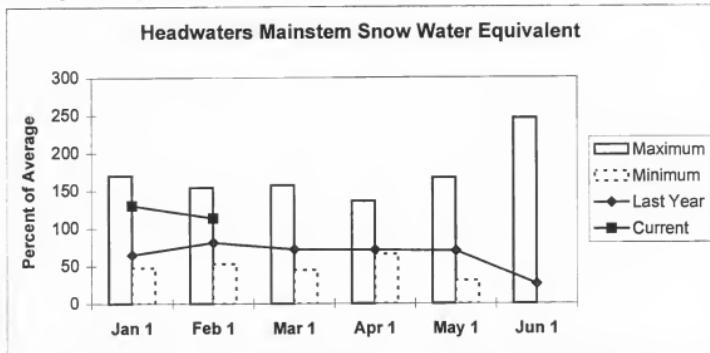
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(D) - The operational measurement of flow at this point has been discontinued.

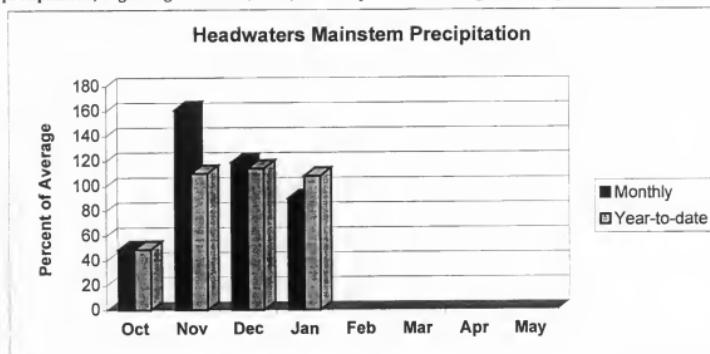
Missouri Mainstem River Basin

Snowpack conditions in the Headwaters Missouri Mainstem River Basin were above average. Snow water content was 119 percent of average and 159 percent of last year.



January maximum swe was established in 1997 and minimum swe in 1977; February maximum swe was in 1972 and minimum swe was in 1977; March maximum swe in 1972 and minimum swe was in 1977; April maximum swe was in 1972 and minimum swe was in 1961; May maximum swe was in 1975 and minimum swe was in 1977; and June maximum swe was in 1982 and minimum swe was in 1992. Average is for the period 1961 through 1990.

Mountain precipitation during January was 95 percent of average and 85 percent of last year. Valley precipitation during January was 91 percent of average and 131 percent of last year. Mountain and valley water year precipitation, beginning October 1, 1998, was 108 percent of average and 122 percent of last year.



Canyon Ferry Lake storage was 104 percent of average and 96 percent of last year; Helena Valley storage was 98 percent of average and 102 percent of last year; Lake Helena storage was 108 percent of average and 102 percent of last year; Hauser & Helena storage was 104 percent of average and 101 percent of last year; Holter Lake storage was 111 percent of average and 100 percent of last year; and Fort Peck Lake storage was 103 percent of average and 101 percent of last year.

Surface Water Supply Indexes (SWSI's) were +0.6 in the Missouri River above Canyon Ferry; +0.7 in the Missouri River below Canyon Ferry; +1.7 in the Missouri River above Fort Peck; and +1.1 in the Missouri River below Fort Peck.

MISSOURI MAINSTEM RIVER BASIN
Streamflow Forecast - February 1, 1999

Forecast Point	Forecast Period	<===== Drier ===== Future Conditions ===== Wetter =====>			30-Yr Avg. (1000AF)			
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF) (% AVG.)				
MISSOURI RIVER at Toston (2)	APR-JUL	1511	1933	2220	107	2507	2929	2075
	APR-SEP	1788	2246	2580	107	2914	3358	2416
PRICKLY PEAR CREEK near Clancy	APR-JUL	11.7	16.8	20	88	24	29	23
	APR-SEP	13.9	20	24	90	29	35	27
GIBSON Reservoir Inflow (2)	APR-JUL	476	556	610	128	664	744	478
	APR-SEP	524	608	665	126	722	806	526
MISSOURI RIVER at Fort Benton (2)	APR-JUL	2225	2996	3520	114	4044	4815	3087
	APR-SEP	2795	3639	4190	114	4741	5591	3678
MARIAS RIVER near Shelby (2)	APR-JUL	401	508	580	130	652	759	447
	APR-SEP	432	541	615	126	689	798	487
MISSOURI RIVER at Virgelle (2)	APR-JUL	2985	3670	4135	115	4600	5285	3595
	APR-SEP	3247	4476	4930	117	5384	6832	4217
MISSOURI RIVER near Landusky (2)	APR-JUL	3697	4279	4675	120	5071	5633	3897
	APR-SEP	3618	5130	5500	120	5870	7649	4580
MISSOURI RIVER below Fort Peck (2)	APR-JUL	3641	4331	4800	120	5269	5959	4015
	APR-SEP	3395	5001	5450	122	5899	7505	4467
LAKE SAKAKAWEA Inflow (2)	APR-JUL	8766	10617	11875	120	13133	14984	9897
	APR-SEP	9871	12182	13710	121	15238	17700	11346

MISSOURI MAINSTEM RIVER BASIN

Reservoir Storage (1000 AF) - End of January

MISSOURI MAINSTEM RIVER BASIN

Watershed Snowpack Analysis - February 1, 1999

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Date Sites	This Year as % of Last Yr	Average
		This Year	Last Year	Avg				
CANYON FERRY LAKE	2043.0	1657.0	1719.0	1596.0	HEADWATERS MAINSTEM	9	137	113
HELENA VALLEY	9.2	4.6	4.5	4.7	SMITH-JUDITH-MUSSELSHELL	8	142	113
LAKE HELENA	10.4	11.1	10.9	10.3	SUN-TETON-MARIAS	7	180	134
HAUSER & HELENA	61.9	63.6	63.1	61.3	MAINSTEM ab FT PECK RES	23	154	120
HOLTER LAKE	81.9	80.9	81.1	72.9	MILK RIVER BASIN	10	233	122
FORT PECK LAKE (MAF)	18.9	15.3	15.2	14.9	MISSOURI MAINSTEM BASIN	32	159	119

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

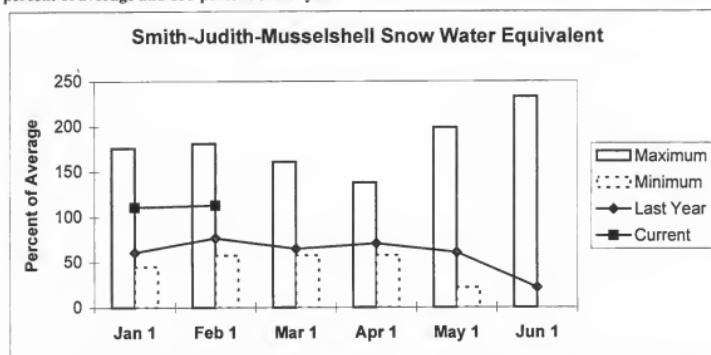
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(D) - The operational measurement of flow at this point has been discontinued.

Smith-Judith-Musselshell River Basins

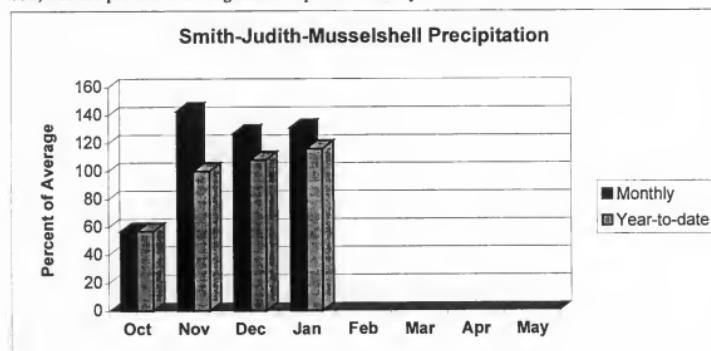
Snowpack conditions in the Smith-Judith-Musselshell River Basins were above average. Snow water content was 113 percent of average and 142 percent of last year.

Snow water content in the Smith River Basin was 127 percent of average and 148 percent of last year; in the Judith River Basin was 106 percent of average and 136 percent of last year; and in the Musselshell Basin River was 97 percent of average and 135 percent of last year.



January maximum swe was established in 1997 and minimum swe in 1988; February maximum swe was in 1978 and minimum swe was in 1987; March maximum swe was in 1978 and minimum swe was in 1987; April maximum swe was in 1970 and minimum swe was in 1992; and May maximum swe was in 1970 and minimum swe was in 1987; and June maximum swe was in 1982 and minimum swe was in 1992. Average is for the period 1961 through 1990.

Mountain and valley precipitation during January in the Smith-Belts was 129 percent of average and 103 percent of last year; in the Judith was 130 percent of average and 137 percent of last year; and in the Musselshell was 167 percent of average and 119 percent of last year. Mountain and valley water year precipitation, beginning October 1, 1998, was 116 percent of average and 146 percent of last year.



Smith River storage was 117 percent of average and 87 percent of last year; Newlan Creek storage was 103 percent of average; Bair storage was 84 percent of average and 82 percent of last year; Martinsdale storage was 113 percent of average and 66 percent of last year; and Deadman's Basin was 124 percent of average and 85 percent of last year.

Surface Water Supply Index (SWSI) was +1.9 in the Smith River and +1.5 in the Musselshell River.

SMITH-JUDITH-MUSSELSHELL RIVER BASINS
Streamflow Forecasts - February 1, 1999

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		<<===== Drier =====>>		Chance Of Exceeding *		Wetter		
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF) (% AVG.)	30% (1000AF)	10% (1000AF)		
SHEEP CREEK nr White Sulphur Springs	APR-JUL	15.4	18.3	20	112	22	25	18.1
	APR-SEP	18.1	21	24	112	26	29	21
SMITH RIVER blw Eagle Creek	APR-JUL	73	101	120	117	139	167	103
	APR-SEP	91	123	145	117	167	199	124
NF MUSSELSHELL near Delpine	APR-JUL	3.71	5.10	6.05	126	7.00	8.39	4.80
	APR-SEP	4.42	5.98	7.05	126	8.12	9.68	5.60
SF MUSSELSHELL abv Martinsdale	APR-JUL	26	46	60	115	74	94	52
	APR-SEP	29	50	64	114	78	99	56

SMITH-JUDITH-MUSSELSHELL RIVER BASINS
Reservoir Storage (1000 AF) - End of January

SMITH-JUDITH-MUSSELSHELL RIVER BASINS
Watershed Snowpack Analysis - February 1, 1999

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
SMITH RIVER	10.6	7.4	8.5	6.3	SMITH	4	148	127
NEWLAN CREEK	12.4	9.1	---	8.8	JUDITH	4	136	106
BAIR	7.0	3.2	3.9	3.8	MUSSELSHELL	3	135	97
MARTINSDALE	23.1	10.4	15.8	9.2	SMITH-JUDITH-MUSSELSHELL	8	142	113
DEADMAN'S BASIN	72.2	53.5	62.8	43.0				

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

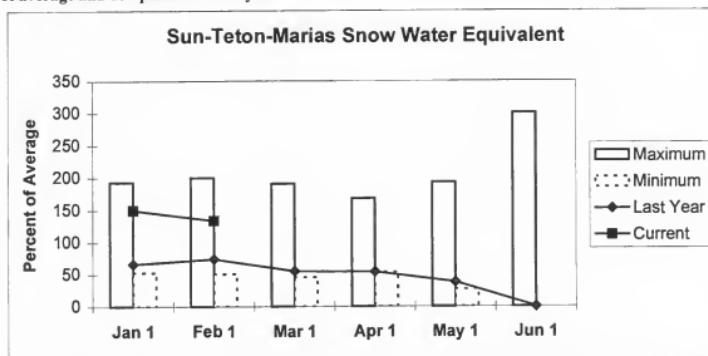
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(D) - The operational measurement of flow at this point has been discontinued.

Sun-Teton-Marias River Basins

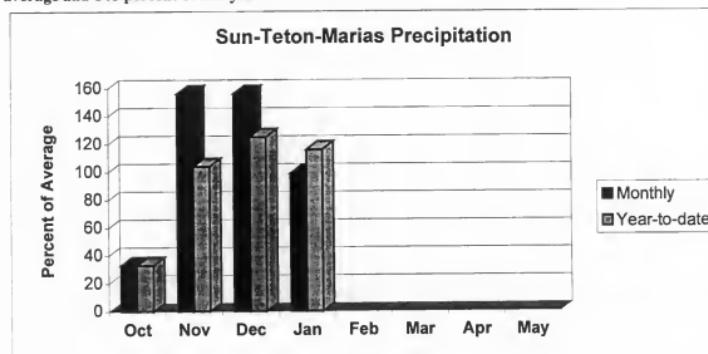
Snowpack conditions in the Sun-Teton-Marias River Basins were well above average. Snow water content was 134 percent of average and 180 percent of last year.

Snow water content in the Sun River Basin was 131 percent of average and 167 percent of last year; in the Teton River Basin was 132 percent of average and 191 percent of last year; and in the Marias River Basin was 134 percent of average and 184 percent of last year.



January maximum swe was established in 1997 and minimum swe was in 1988; February maximum swe was in 1972 and minimum swe was in 1977; March maximum swe was in 1972 and minimum swe was in 1984; April maximum swe was in 1972 and minimum swe was in 1984; May maximum swe was in 1972 and minimum swe was in 1977; and June maximum was in 1982 and minimum swe was in 1992. Average is for the period 1961 through 1990.

Mountain and valley precipitation during January in the Sun was 72 percent of average and 66 percent of last year; in the Teton was 95 percent of average and 123 percent of last year; and in the Marias was 105 percent of average and 133 percent of last year. Mountain and valley water year precipitation, beginning October 1, 1998, was 116 percent of average and 146 percent of last year.



Gibson storage was 79 percent of average and 80 percent of last year; Pishkun storage was 111 percent of average and 101 percent of last year; Willow Creek storage was 132 percent of average and 94 percent of last year; Lower Two Medicine Lake storage was 0 percent of average and 0 percent of last year; Four Horns Lake storage was 75 percent of average and 85 percent of last year; Swift storage was 102 percent of average and 94 percent of last year; Lake Frances storage was 68 percent of average and 64 percent of last year; and Lake Elwell (Tiber) storage was 122 percent of average and 92 percent of last year.

Surface Water Supply Indexes (SWSI's) were +2.7 in the Sun River; +2.9 in the Teton River; +3.2 in the Birch/Dupuyer Creeks; and +3.2 in the Marias River.

SUN-TETON-MARIAS RIVER BASINS
Streamflow Forecasts - February 1, 1999

Forecast Point	Forecast Period	Future Conditions						
		<<---- Drier ----->> Future Conditions ----- Wetter ----->		Chance Of Exceeding *		30-Yr Avg.		
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF) (% AVO.)	30% (1000AF) (1000AF)	10% (1000AF) (1000AF)	(1000AF)	
GIBSON Reservoir Inflow (2)	APR-JUL	476	556	610	128	664	744	478
	APR-SEP	524	608	665	126	722	806	526
TWO MEDICINE RIVER near Browning (2)	APR-JUL	203	252	285	133	318	367	215
	APR-SEP	218	267	300	132	333	382	228
BADGER CREEK near Browning (2)	APR-JUL	94	116	130	125	144	166	104
	APR-SEP	112	134	150	125	166	188	120
SWIFT Reservoir Inflow	APR-JUL	59	75	85	125	96	111	68
	APR-SEP	72	89	100	125	111	128	80
DUPUYER CREEK near Velier	APR-JUL	4.7	13.8	20	129	26	35	15.5
	APR-SEP	6.4	16.0	23	129	29	39	17.4
CUT BANK CREEK at Cut Bank	APR-JUL	80	95	105	121	115	131	87
	APR-SEP	91	105	115	120	125	140	96
MARIAS RIVER near Shelby (2)	APR-JUL	401	508	580	130	652	759	447
	APR-SEP	432	541	615	126	689	798	487

SUN-TETON-MARIAS RIVER BASINS
Reservoir Storage (1000 AF) - End of January

SUN-TETON-MARIAS RIVER BASINS
Watershed Snowpack Analysis - February 1, 1999

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of Last Yr Average	
		This Year	Last Year	Avg				
GIBSON	99.1	34.8	43.4	44.2	SUN	2	167	131
PISKUN	32.0	19.7	19.6	17.7	TETON	3	191	132
WILLOW CREEK	32.2	28.0	29.9	21.2	MARIAS	4	184	134
LOWER TWO MEDICINE LAKE	11.9	0.0	11.9	6.7	SUN-TETON-MARIAS	7	180	134
FOUR HORNS LAKE	19.2	9.3	10.9	12.4				
SWIFT	30.0	15.6	16.6	15.3				
LAKE FRANCES	112.0	47.5	73.7	69.6				
LAKE ELWELL (TIBER)	1347.0	711.5	769.6	583.0				

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

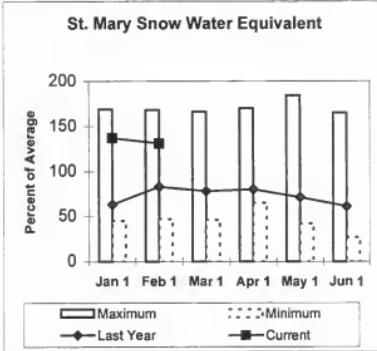
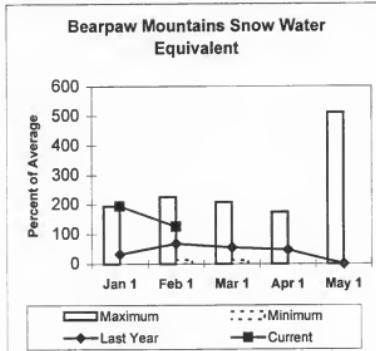
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(2) - The value is natural volume - actual volume may be affected by upstream water management.

(D) - The operational measurement of flow at this point has been discontinued.

St. Mary and Milk River Basins

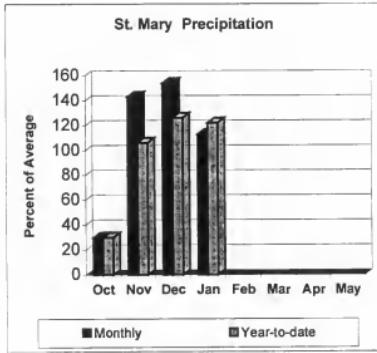
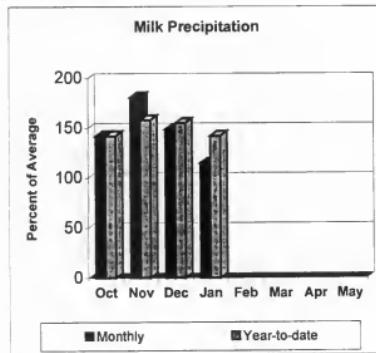
Snowpack conditions in the St. Mary and Milk River Basins were above average. Snow water content in the Saint Mary River Basin was 131 percent of average and 158 percent of last year. The Milk River Basin, Bearpaw Mountains and Cypress Hills in Canada, was 125 percent of average and 224 percent of last year.



Bearpaw - January maximum swe was established in 1978 and minimum swe was in 1981; February maximum swe was 1978 and minimum was in 1973; March maximum swe was 1978 and minimum swe was 1981; April maximum swe was in 1975 and minimum swe was in 1983; May maximum swe was 1975 and the minimum has occurred in several years. Average is for the period 1961 through 1990.

St. Mary - January maximum swe was established in 1997 and minimum swe was in 1988; February maximum swe was in 1972 and minimum swe was in 1977; March maximum swe was in 1972 and minimum swe was in 1977; April maximum swe was in 1972 and minimum swe was in 1992; May maximum swe was in 1997 and minimum swe was in 1977; and June maximum swe was in 1991 and minimum swe was 1992. Average is for the period 1961 through 1990.

Mountain and valley precipitation in the St. Mary River Basin during January was 113 percent of average and 101 percent of last year; and in the Milk River Basin during January was 115 percent of average and 154 percent of last year. Mountain and valley water year precipitation, beginning October 1, 1998, was 130 percent of average and 159 percent of last year.



Lake Sherburne storage was 52 percent of average and 44 percent of last year; Fresno storage was 88 percent of average and 91 percent of last year; Beaver Creek storage was 144 percent of average and 108 percent of last year; and Nelson storage was 99 percent of average and 73 percent of last year.

Surface Water Supply Index (SWSI) was +1.3 in the Milk River.

ST. MARY and MILK RIVER BASINS
Streamflow Forecasts - February 1, 1999

Forecast Point	Forecast Period	Drier				Future Conditions			Wetter	
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)		
SHERBURNE LAKE Inflow (2)	APR-JUL	99	109	115	108	121	131	107		
	APR-SEP	115	124	130	104	136	145	125		
ST. MARY RIVER near Babb	APR-JUL	394	427	450	114	473	506	395		
	APR-SEP	470	506	530	115	554	590	463		
ST. MARY RIVER at US/CAN Border (2)	APR-JUL	445	493	525	114	557	605	462		
	APR-SEP	529	577	610	113	643	691	539		
MILK RIVER at Western Crossing	MAR-JUL	30	41	48	109	55	66	44		
	MAR-SEP	33	43	50	109	57	68	46		
MILK RIVER at Eastern Crossing (2)	MAR-JUL	54	80	98	123	116	142	80		
	MAR-SEP	61	87	105	119	123	149	88		
BEAVER CREEK Reservoir Inflow	MAR-JUL	4.0	9.4	13.1	127	16.8	22	10.3		

ST. MARY and MILK RIVER BASINS

Reservoir Storage (1000 AF) - End of January

ST. MARY and MILK RIVER BASINS

Watershed Snowpack Analysis - February 1, 1999

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of Last Yr Average		
		This Year	Last Year	Avg					
LAKE SHERBURNE	64.3	12.4	27.9	24.0	ST. MARY	2	158	131	
FRESNO	127.0	45.0	49.4	51.2	BEARPAW MOUNTAINS	4	146	105	
BEAVER CREEK	3.5	2.6	2.4	1.8	CYPRESS HILLS, CANADA	6	367	137	
NELSON	66.8	36.1	49.7	36.4	MILK RIVER BASIN	9	224	125	
					ST. MARY & MILK BASINS	12	181	128	

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

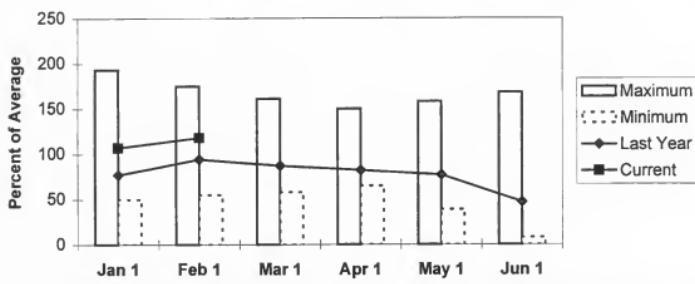
(2) - The value is natural volume - actual volume may be affected by upstream water management.

(D) - The operational measurement of flow at this point has been discontinued.

Upper Yellowstone River Basin

Snowpack conditions in the Upper Yellowstone River Basin were above average. Snow water content was 118 percent of average and 125 percent of last year.

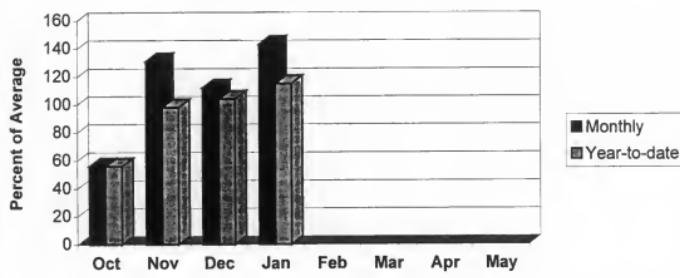
Upper Yellowstone Snow Water Equivalent



January maximum SWE was established in 1997 and minimum SWE was in 1988; February maximum SWE was in 1997 and minimum SWE was in 1977; March maximum SWE was in 1997 and minimum SWE was in 1977; April maximum SWE was in 1971 and minimum SWE was in 1981; May maximum SWE was in 1997 and minimum SWE was in 1987; and June maximum SWE was 1982 and minimum SWE was in 1987 and 1994. Average is for the period 1961 through 1990.

Mountain precipitation during January was 144 percent of average and 110 percent of last year. Valley precipitation during January was 115 percent of average and 91 percent of last year. Mountain and valley water year precipitation, beginning October 1, 1998, was 115 percent of average and 117 percent of last year.

Upper Yellowstone Precipitation



Mystic Lake storage was 75 percent of average and 112 percent of last year and Cooney storage was 116 percent of average and 89 percent of last year.

Surface Water Supply Indexes (SWSI's) were +1.9 in the Yellowstone River above Livingston; -0.4 in the Shields River; -0.2 in the Boulder River; -0.1 in the Stillwater River; +0.6 in the Rock/Red Lodge Creeks; +0.6 in the Clarks Fork River; and +1.2 in the Yellowstone River above Bighorn River.

UPPER YELLOWSTONE RIVER BASIN
Streamflow Forecasts - February 1, 1999

Forecast Point	Forecast Period	<<---- Drier Future Conditions ----- Wetter ----->>				30-Yr Avg. (1000AF)		
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	30% (1000AF) (% AVG.) (1000AF)			
YELLOWSTONE at Lake Outlet	APR-JUL	562	652	700	122	748	818	573
	APR-SEP	805	897	960	121	1023	1115	792
YELLOWSTONE RIVER at Corwin Spgs.	APR-JUL	1684	1842	1950	121	2058	2216	1609
	APR-SEP	2016	2200	2325	120	2450	2634	1937
YELLOWSTONE RIVER near Livingston	APR-JUL	2005	2157	2260	122	2363	2515	1855
	APR-SEP	2402	2583	2705	121	2827	3008	2241
SHIELDS RIVER nr Livingston	APR-JUL	68	114	145	90	176	222	162
	APR-SEP	72	125	160	89	195	248	179
BOULDER RIVER at Big Timber	APR-JUL	244	289	320	96	351	396	335
	APR-SEP	269	317	350	96	383	431	364
MYSTIC LAKE Reservoir Inflow (2)	APR-JUL	53	59	63	103	67	74	61
	APR-SEP	68	75	80	101	85	92	79
STILLWATER RIVER nr Absarokee (2)	APR-JUL	383	447	490	98	533	597	498
	APR-SEP	464	533	580	98	627	696	593
CLARKS FORK RIVER nr Belfry	APR-JUL	467	526	565	106	604	663	532
	APR-SEP	520	580	620	105	660	720	590
COONEY Reservoir Inflow (2)	APR-JUL	16.2	33	44	94	55	72	47
	APR-SEP	26	43	54	95	65	82	57
YELLOWSTONE RIVER at Billings (2)	APR-JUL	3333	3819	4150	116	4481	4967	3577
	APR-SEP	4295	4624	4980	118	5336	5643	4211

UPPER YELLOWSTONE RIVER BASIN
Reservoir Storage (1000 AF) - End of January

UPPER YELLOWSTONE RIVER BASIN
Watershed Snowpack Analysis - February 1, 1999

Reservoir	Capacity	Usable Storage			Watershed	Number of Date Sites	This Year as % of Last Yr Average	
		This Year	Last Year	Avg				
MYSTIC LAKE	21.0	6.4	5.7	8.5	YELLOWSTONE ab LIVINGSTON	14	127	121
COONEY	27.4	17.0	19.0	14.6	SHIELDS	4	122	109
					BOULDER-STILLWATER	3	124	112
					CLARK'S FORK-ROCK CREEK	8	121	116
					UPPER YELLOWSTONE BASIN	25	125	118

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

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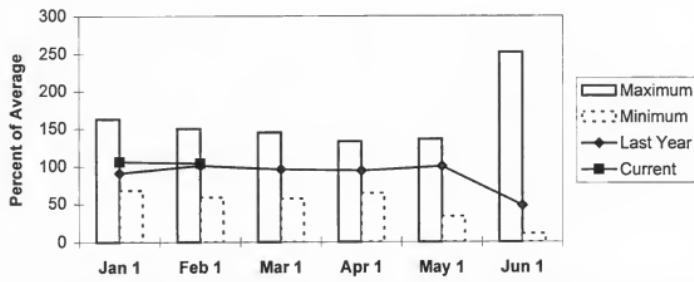
(2) - The value is natural volume - actual volume may be affected by upstream water management.

(D) - The operational measurement of flow at this point has been discontinued.

Lower Yellowstone River Basin

Snowpack conditions in the Lower Yellowstone River Basin, in Wyoming, were near average. Snow water content was 104 percent of average and 103 percent of last year.

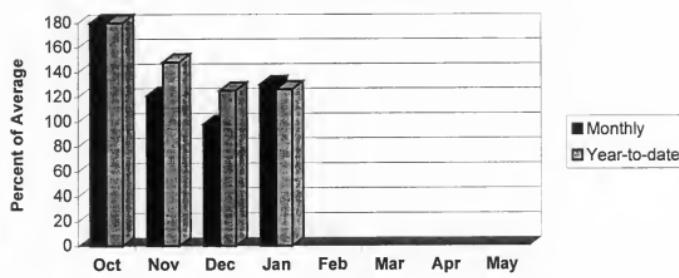
Lower Yellowstone Snow Water Equivalent



January maximum swe was established in 1997 and minimum swe was in 1981; February maximum swe was in 1997 and minimum swe was in 1981; March maximum swe was in 1986 and minimum swe was in 1977; April maximum swe was in 1986 and minimum swe was in 1981; May maximum swe was in 1997 and minimum swe was in 1981; and June maximum swe was in 1995 and minimum swe was in 1994. Average is for the period 1961 through 1990.

Mountain and valley precipitation during January was 130 percent of average and 100 percent of last year. Mountain and valley water year precipitation, beginning October 1, 1998, was 126 percent of average and 120 percent of last year.

Lower Yellowstone Precipitation



Bighorn Lake storage was 103 percent of average and 93 percent of last year and Tongue River storage was 23 percent of average and 122 percent of last year.

Surface Water Supply Indexes (SWSI's) were +1.5 in the Bighorn River below Bighorn Lake; -0.6 in the Little Bighorn River; +1.4 in the Yellowstone River below Bighorn River; -0.6 in the Tongue River; and -0.6 in the Powder River.

LOWER YELLOWSTONE RIVER BASIN
Streamflow Forecasts - February 1, 1999

Forecast Point	Forecast Period	<<----- Drier ----- Future Conditions ----- Wetter ----->>				30-Yr Avg. (1000AF)		
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	30% (1000AF) (1000AF)			
YELLOWSTONE RIVER at Billings (2)	APR-JUL	3333	3819	4150	116	4481	4967	3577
	APR-SEP	4295	4624	4980	118	5336	5643	4211
BIGHORN RIVER nr St. Xavier (2)	APR-JUL	1211	1583	1835	112	2087	2459	1645
	APR-SEP	1417	1734	2000	112	2266	2530	1794
LITTLE BIGHORN RIVER nr Hardin	APR-JUL	54	84	105	75	126	156	140
	APR-SEP	64	97	120	76	143	176	157
TONGUE RIVER Reservoir Inflow (2)	APR-JUL	95	148	185	80	222	275	230
	APR-SEP	116	172	210	82	248	304	256
YELLOWSTONE RIVER at Miles City (2)	APR-JUL	4591	5579	6250	115	6921	7909	5431
	APR-SEP	5841	6505	7270	116	8035	8668	6281
POWDER RIVER at Moorhead	APR-JUL	138	199	240	114	281	342	211
	APR-SEP	157	218	260	112	302	363	232
POWDER RIVER near Locate	APR-JUL	203	252	285	113	318	367	252
	APR-SEP	108	268	310	112	352	458	276
YELLOWSTONE RIVER nr Sidney (2)	APR-JUL	5015	6090	6820	115	7550	8625	5925
	APR-SEP	6201	7142	7990	117	8838	9676	6814

LOWER YELLOWSTONE RIVER BASIN
Reservoir Storage (1000 AF) - End of January

LOWER YELLOWSTONE RIVER BASIN
Watershed Snowpack Analysis - February 1, 1999

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of Last Yr	Average
		This Year	Last Year	Avg				
BIGHORN LAKE	1356.0	864.1	926.0	839.2	WIND RIVER (Wyoming)	19	97	107
TONGUE RIVER	68.0	6.2	5.1	27.1	SHOSHONE RIVER (Wyoming)	7	126	130
					BIGHORN RIVER (Wyoming)	21	117	113
					LITTLE BIGHORN (Wyoming)	3	89	87
					TONGUE RIVER (Wyoming)	9	91	87
					POWDER RIVER (Wyoming)	9	103	86
					LOWER YELLOWSTONE BASIN	47	103	104

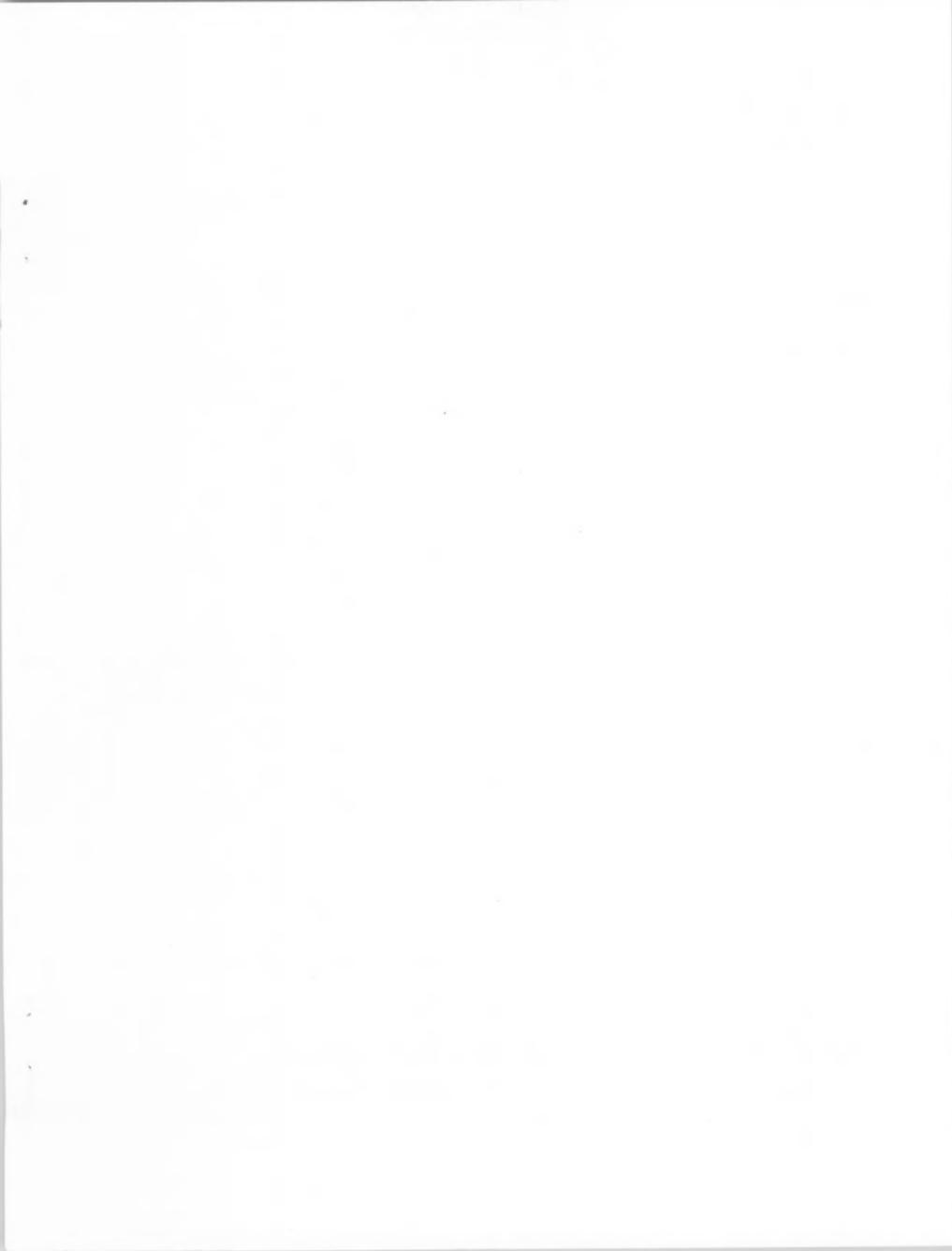
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Basin Outlook Report**
Natural Resources Conservation Service
Bozeman, MT

